LIBRARY OF CONGRESS
PERIODICAL DIV.
JUN 19 1905

The American Artisan
And Hardware Record

Vol. 49. No. 24. CHICAGO, JUNE 17, 1905. $2.00 Per Year.

BOMMER SPRING HINGES
(ESTABL. 1876.)
ARE THE BEST
BOMMER BROTHERS, N.Y'RS. 256 TO 276 CLASSON AVE. BROOKLYN, N.Y.

COLUMBUS BOLT WORKS
COLUMBUS, OHIO.
We carry a full line of Bolts, Nuts, Washers, Carriage Forgings, Etc.
Our 1905 Catalog will be mailed on receipt of 3-cent stamp to cover postage.

CHAIN
"American" and "Niagara"
Halter Chains—Dog Chains—Cow Chains—Coil Chains. Chains for all kinds of Machinery.
ONEIDA COMMUNITY
Oneida, N. Y.

WE MAKE
Stove, Tire and Carriage Bolts—Rods, Rivets, Machine Screws, Nuts, Hinge Pins and Special Bolts, Screws and Nuts of all descriptions
THE ATLAS BOLT & SCREW CO.
Cleveland, O.

Always On Top
Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. American Seal Elastic Oil Cement is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.
Agencies:
THE PERKINS ROOFING & SUPPLY CO.
255 Lake St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, MO.

This Space for Sale.
Inquire of Daniel Stern,
69 Dearborn St., Chicago

BLACK DIAMOND FILES and RASPS
PERFECT—ALWAYS
Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.
G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA

"BROWN" TIE-OUT CHAINS
Fitted with Stake Ring, a Swivel every ten feet, and a Swivel Snap.
A FREE SAMPLE WILL TELL THE STORY.
The BRIDGEPORT CHAIN CO.
BRIDGEPORT, CONN.

No Matter Why We Do It

Leave That to Us

We Offer to Sell Furnaces at the following Prices:

FURNACES	BASE BURNERS
20 in. Fire Pot, same price as 14 in. Fire Pot	
22 in. Fire Pot, same price as 15 in. Fire Pot	
24 in. Fire Pot, same price as 16 in. Fire Pot	

Furnaces are full return Flue. Have high fronts, draw-out duplex grates and all features shown in cut. Orders can be placed now for shipments during the year.

Pittsburgh Stove & Range Co., Pittsburgh, Pa.

The Clermont Fire Pot

is vitally different from those in all other soft coal stoves

The CLERMONT Hot Blast Fire Pot, moulded in one piece, has narrow, perpendicular openings cast in the sides, admitting a constant, even flow of air, no matter how much coal there is in the Fire Bowl.

This air is taken through a perfect-fitting top screw Register, and passing through the air chamber around the fire pot is superheated—and on admission to the fire, combines the oxygen with the smoke and gases, insuring perfect combustion.

The CLERMONT is made in four sizes, 14 inch to 20 inch fire pots.

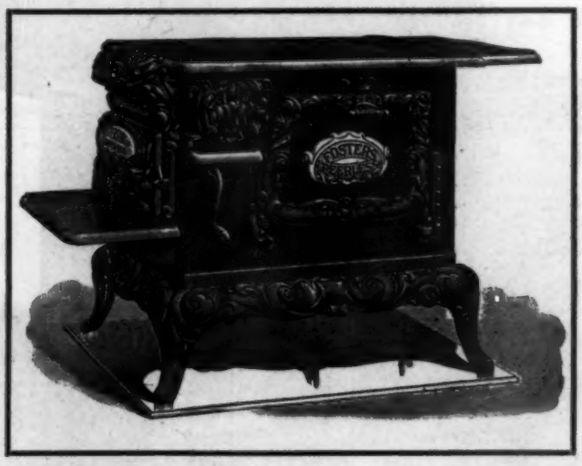
Why not please your customers—why not sell the CLERMONT?

Descriptive circulars and prices on request.

Gem City Stove Co.

DAYTON, OHIO

FOSTER'S Peerless Steel Cook
FOSTER'S Prize Steel Range



BUILT FOR BUYERS OF THE BEST

Additional improvements have been made in our line during the past season. Our goods will be found more salable than ever before.

We need your orders. We need every dealer's patronage. We are here to please you, and please you we will and must.

Send for our latest circulars. Ask about our advertising campaigns. We do the selling for both—ourselves and yourselves.

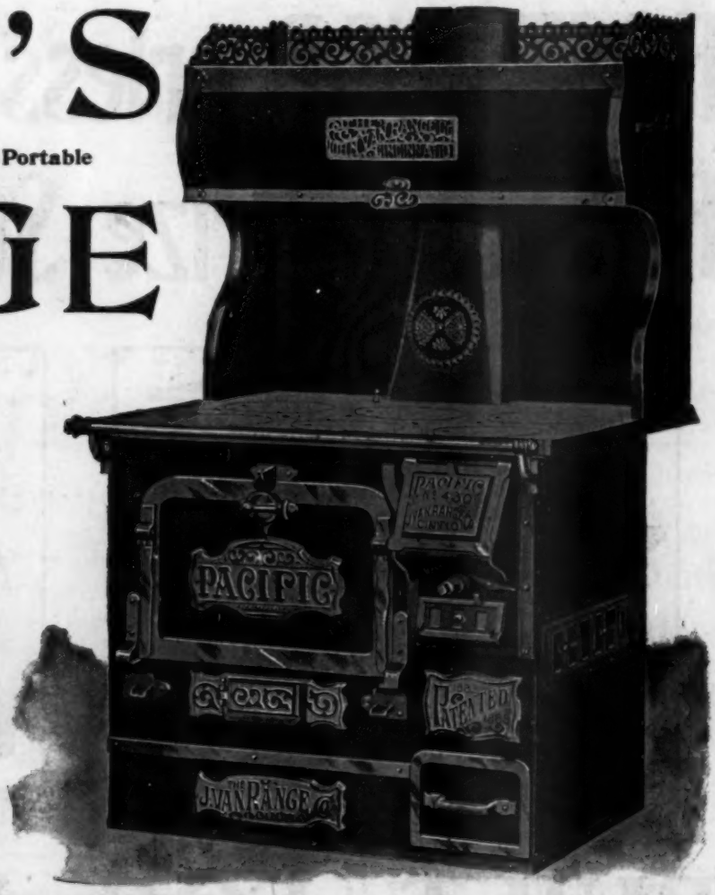
THE FOSTER STOVE CO.

Makers of COOK and HEATING STOVES.

IRONTON, - - - - - OHIO

VAN'S RANGE

Patent Improved Wrought Steel Portable



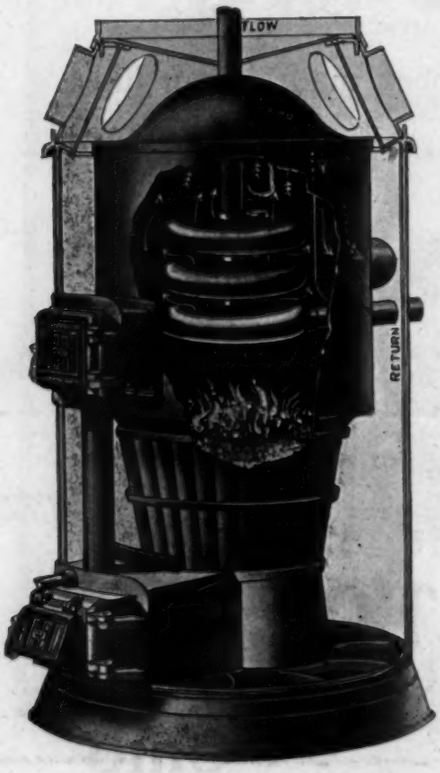
For Hotels, Restaurants. Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The John Van Range Company

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO

The Crown Combination Warm Air and Hot Water Heater



to admit of heating remote rooms—rooms not easily heated by warm air. We offer this Combination Furnace by which said rooms are easily heated by a hot water generator attached as shown to this furnace. We make these furnaces to carry from 50 to 350 square feet of radiation. This construction is of the simplest and most effective type—scarcely more expensive than the ordinary warm air furnace.

Write us for further particulars

THE MARCH-BROWNBACK STOVE COMPANY

(Makers of Furnaces for long distance heating.)

POTTSTOWN, PENNSYLVANIA

After you have sold an oil stove you don't want your customer dissatisfied. You want him to get out among his friends and brag about it, and that is what he *will* do if you sell him a good one.

Barler Ideal Oil Heaters Are Good Ones.

You can't sell repairs for them, because they don't need repairs, but every season you can sell more Barler Heaters than you sold the season before.

If no other dealer already controls them in your locality, we have a proposition to make to you.

Write for it. Do it now.

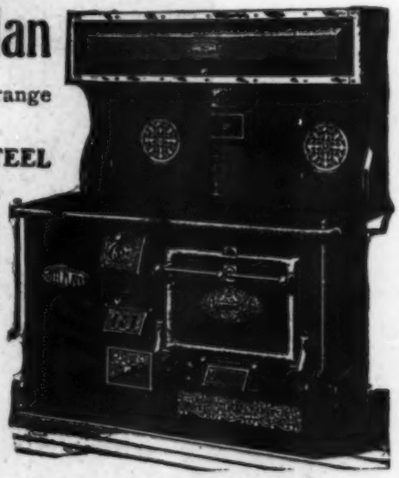
A. C. Barler Mfg. Co., 104-106 Lake St., Chicago

EASTERN AGENCIES:
Prescott & Co., Boston. F. M. Borden & Bro., Philadelphia

The Short-Breathed Man

don't run many races and the steel range with inadequate flues don't win out.

FLUES are the **LUNGS** of a **STEEL RANGE** and the special **DOUBLE FLUE** construction of Champion and Marquart Steel Ranges makes it a great fuel economizer.



CHAMPION STEEL RANGE CO., Cleveland, O.

Here's a Hot Weather Snap for Wide-Awake Range Dealers

I am going to sell 1000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys out of trouble during the hot weather by keeping my foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60. each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a life time, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

Post....

Yourself by sending in $2.00 for a year's subscription to THE AMERICAN ARTISAN, published weekly at 69 Dearborn Street, Chicago, the best hardware, stove and tinware paper, published. Send for our list of premium books.

THE BEST or POOREST COAL

CAN BE USED IN THE

CANTON Perfect Blast Furnace

Notice the large tubular radiator, perfect blast device, secondary radiator inside of casing, and other good features. GET OUR BOOK.

The Bonnot Company
Canton, Ohio

1885 **THE RETORT** 1905

Nos. 216	218	220
Weights 320 lbs.	405 lbs.	475 lbs.

This line of medium priced Heaters for

HARD COAL, SOFT COAL, COKE and LIGNITE

offers the trade the

GREATEST VARIETY

in sizes and prices of any line in the market.

EVERY ONE SPECIALTIES,

whose sale you can

CONTROL

and secure profits.

In these days of catalogue house competition it is necessary that you have something different from the catalogue houses as well as your local competitors.

We will be pleased to answer questions and quote prices.

MARION STOVE CO.,

MARION, IND.

HERO FURNACES

100 Series—Just Out.

Are The Best for any Climate.

You Can't Buy a Better Furnace—It Isn't Made.

Ask for new Catalog.

Chas. Smith Company

97 to 101 Lake St., CHICAGO

Persistent Advertising

ONE who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—*Advertising Experience.*

CHAS. LOEB, PRESIDENT. WM. R. W. HENTZ, VICE PRES. & SECY. H. L. HAAS, TREAS.

Zucker & Levett & Loeb Co.

Established 1863 Manufacturers, Importers & Exporters of Incorporated 1891

Nickel and Electro Platers' Supplies.

Polishing Materials.

Electric Dynamos and Motors for all purposes.

TELEPHONE, 947-948 CHELSEA.

BRANCH OFFICES, CHICAGO, ILL., BIRMINGHAM, ENG.

526-528-530 West 25th St.

CABLE ADDRESS, "LOEBIAN" NEW YORK.

New York April 28, 1905.

The American Artisan,

69 Dearborn Street,

Chicago, Ill.

Gentlemen:

We take much pleasure in stating to you that our fifteen (15) years advertisements in your valuable paper have been productive of satisfactory results to us, and we believe the results that we have obtained through this medium, has been the means of securing large valuable trade which otherwise we should not have received. We are well satisfied, and shall no doubt continue our advertisements in your valuable journal for many years to come.

Wishing you every possible success, we are,

Very truly yours,

ZUCKER & LEVETT & LOEB CO.

C. Loeb Pres.

#2

C. L.

JOHN KONTNY

65-67 N. DESPLAINES ST.

CHICAGO

WESTERN AGENT

TRIUMPH KING FURNACE. Five Sizes. Hard or Soft Coal. Portable or Brick Set.

HERE IT IS

Proof that the "PATRIC" is the most attractive furnace on the market to the prospective purchaser. Read the following letter just received:

THE PATRIC FURNACE COMPANY, June 9th, '05.
SPRINGFIELD, OHIO.

Gentlemen:—

* * * * * "The car load of furnaces will not last me until the season opens good. I have sold 15 of the 25 I got, all to go in before September first. Last Tuesday I sold eleven No. 2's to one party. That will take all the No. 2's I have in stock, except the sample. I have sold just an even dozen this week and a good prospect for one more.

The "PATRIC" furnace is taking the day here, and the local papers have commented on the fact."

Yours for business,

WHY NOT HANDLE A FURNACE THAT SELLS SO EASILY?

SEND FOR A COPY OF OUR "RED BOOK."

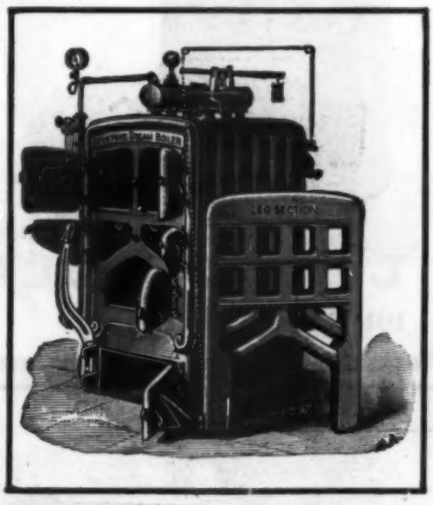
The Patric Furnace Co.,

SPRINGFIELD, OHIO.

BOYNTON

FURNACES, STEAM and HOT WATER HEATERS

Have stood for an honest value for 56 years. They have always worn well—they have required very few repairs—they have given out plenty of heat with a small expenditure for fuel—they have given a steady rather than a spasmodic heat—and that's why dealers have found them a desirable line to handle. Many a dealer has found that the handling of Boynton heaters has been a big help in building him up a reputation for the best work.



Shall be pleased to send you a catalogue and price list.

The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO 207-209 Water St., NEW YORK

CAN you afford Mr. Dealer, to risk your **business reputation** by recommending cheap, inferior and unsatisfactory furnaces? Particularly as such a course is entirely unnecessary when you can secure an agency for

FLORAL CITY FURNACES

which are made with perfect castings by skilled workmen under careful supervision.

Monroe Foundry & Furnace Co., Monroe, Mich.

F. D. BURGESS,

WAUPACA, WIS., writes,

"I advertised a set of Tinner's Tools in your paper and have sold them, and I have received letters from parties wanting them, from all parts of the United States. That goes to show that The American Artisan has a great circulation."

MUELLER FURNACES

are not made with a view of meeting competition (considering price only), but are made on scientific and practical principles, possessing the important requisites of DURABILITY, POWER and ECONOMY.

Dealers don't have to meet figures made by their competitors on inferior heaters, but on nine out of ten furnace jobs can secure a material preference if they install MUELLER furnaces.

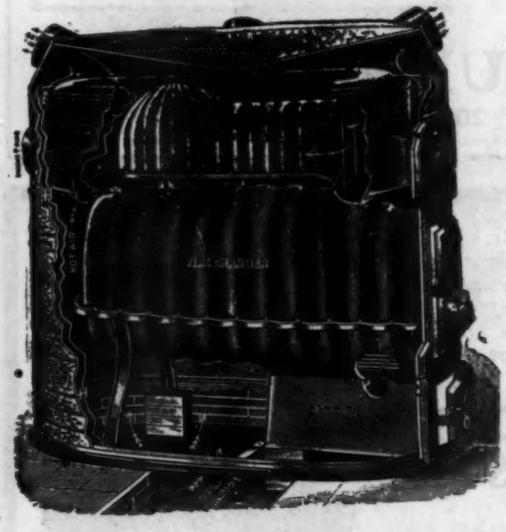
Then why not secure the agency of this well known line of heaters.

GET OUR PRICES ON WALL AND FLOOR REGISTERS

L. J. MUELLER FURNACE CO.

ESTABLISHED 1857

191 Reed Street MILWAUKEE, WIS.



YEAR in, year out we have gone on improving our line of furnaces. Starting with the strongest and most popular product, in the days when hot-air furnaces were a novelty, we have done more than any other firm in proving the immense superiority of furnaces over any other form of heating apparatus. To-day

The

GILT EDGE Line

is recognized the world over as the most ingenious, the most practical example of central heating on the market. It has proved its worth. It is as far ahead of all other makes to-day as it ever was in the past. That means it has no competitor.

R. J. SCHWAB & SONS CO.

THE FURNACE MEN

MILWAUKEE - - - WISCONSIN

PERFECTION

Ventilating School Room Heater

for Township Schools.

Superior to any made in this country.

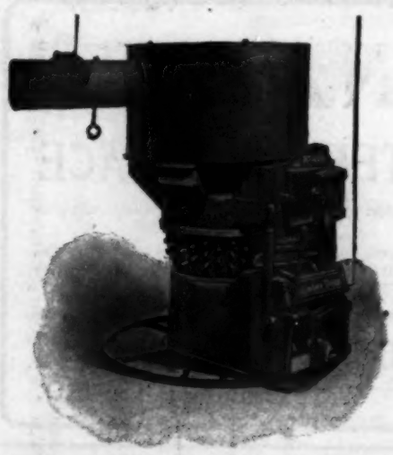
THE MONARCH FURNACE,

made of heavy annealed steel, has a very large radiating surface, has our patent revolving grate, is easy to operate; is absolutely gas and dust tight, and manufactured by

KRUSE & DEWENTER

427-429 E. Washington St., Indianapolis, Ind.

Send for Catalogue and Price List



Honesty
Reliability
Enterprise

The John Grossius Furnace Co.
409-411 East 8th St., - Cincinnati, Ohio

JAHANT

CAST and STEEL RADIATORS

Ask About

The Vibratory Grate

SEND FOR A CATALOG

ROHRBACHER & ALLEN, Akron, O.

EMPEROR FURNACES

FOR WOOD

SIMPLE SAFE DURABLE

ECONOMICAL IN FUEL

The Best and Cheapest Line of Wood Furnaces.
Furnished for either Brick or Galvanized Iron Casing.

BERGSTROM STOVE CO.

Send for Catalogue **NEENAH, WIS.**

HALF THE PROFIT

of a furnace job is lost through the after-work. The tinner receives a summary announcement to make the job work or take out the heater.

The Weir Furnace

causes no such difficulty. It is easily installed and, when set up, gives complete satisfaction. It doesn't leak gas or smoke and is the heaviest steel furnace made; get particulars.

The Meyer Furnace Co., Peoria, Ill.

"The Handy Furnace Pipe"

safe, easily installed, durable. Labor-saving devices make it the cheapest pipe on the market.

F. Meyer & Bro. Co., Peoria, Ill.

Who does the largest and most profitable furnace business—who makes the most money—the man who sells a furnace that requires a lot of Explaining and "Personal Interviews"—or the dealer who sells a furnace that sells itself—the

FRONT RANK STEEL FURNACE

The FRONT RANK is a splendid proposition for the Furnace Dealer who is anxious to build up a profitable Furnace Business.

The FRONT RANK has no cast iron fire pots to crack or warp. It is a very powerful heater because it has long vertical fire travel; it is moderate in price, yet surpasses the more expensive Cast Iron Furnaces—and the FRONT RANK gives absolute protection!

We want to send you our catalogue and quote our prices.

HAYNES-LANGENBERG MFG. CO.,
2301-2309 Lucas Avenue, ST. LOUIS, MO.

Wise People
buy
Wise Furnaces
Manufactured by
The Wise Furnace Co.
Akron, Ohio.

Catalogue and discounts sent on application.

Burns Hard or Soft Coal or Coke. Large Doors.

Fire Brick and Fire Pots

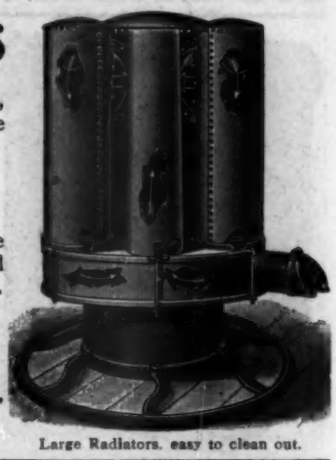
Formerly we used cast iron for the fire pot, but it warped and cracked. Now we use fire brick. This is one of the reasons why

The American Furnace

is strong in places where other furnaces are weak. It is made of heavy steel and riveted like a boiler. We don't cater to the cheap trade. Our goods are good and made to last.

Write for Prices and Secure the Agency BEFORE THE OTHER FELLOW GETS IT.

The American Furnace Co., 1911-13 Pine Street, ST. LOUIS, MO.



Large Radiators, easy to clean out.

The Part that Does the Business

SAVE HALF YOUR FUEL
by using the
ROCHESTER RADIATOR

Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
For Hard or Soft Coal, Wood or Gas.
Price from $2.00 to $12.00.

One square inch of radiating surface directly over the hot current is better than six in a drum or side heater with perpendicular tubes.

Easily cleaned. We guarantee our radiators not to interfere with, or choke the draught.

Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO. 120 Furnace Street ROCHESTER, N.Y

Front View of Register, showing Vapor Pan being placed in position.

There's Nothing Like It!

The WATERLOO is original in every feature—and every feature is a decided advantage.

The Water Pan—which supplies moisture—is easily removed for filling—and when filled, is quickly slid into place, without spilling a drop.

After the Water Pan is filled and in place, the WATERLOO supplies not only a maximum volume of warm air, but also gives off just enough moisture to make the air breathable and healthful.

Show your Furnace Buyer a WATERLOO, and it sells on sight.

Have you read our little booklet?

Send for a copy—and our prices!

WATERLOO REGISTER COMPANY

Waterloo, Iowa

Detroit Wall Register

For First Floor.
Made Right Side Up.
Lake's Regular Size Boxes
(Viz 9x12, 10x12, 12x15, etc.)

No Cutting of Joists
Large Air Capacity

We will make a Special Price on First Order on ½ dozen 10x12 oxidized copper with Tin Box of

$12.00

Shipped subject to approval.

DETROIT REGISTER CO.
DETROIT, MICH.

BOOKS BY MAIL

THE Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

SHEET METAL WORKING. THE FOUNDRY. THE WORKSHOP. HEATING AND VENTILATING. PLUMBING AND DRAINAGE. BICYCLE REPAIRING. THE STORE AND OFFICE.

DANIEL STERN, PUBLISHER and BOOKSELLER 69 DEARBORN ST., CHICAGO

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
- **ALL CAST** Are time tried and worth proven.
- **MODIFIED STEEL** The novelty success of 1904.
- **ALL STEEL** Almost ready and a sure winner.

THE FERROSTEEL CO.. 34 Michigan St., CLEVELAND, OHIO

STOWELL STOVE PIPE REGISTERS

WHITE CEILING PLATE

are the **Best Japanned, Smoothest Castings and Most Attractive Design on the Market** also a full line of

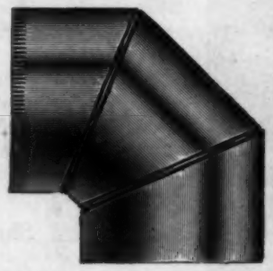
Side Wall and Floor Registers

Write to-day for Register Catalogue No. 2.

STOWELL MFG. & FDY. CO.
51-73 Milwaukee Ave., South Milwaukee, Wis.

ABSOLUTELY THE BEST

Stove Pipe and Elbows



Furnace Pipe and Fittings

THE EXCELSIOR STEEL FURNACE CO., 38 W. Monroe St., CHICAGO
DAY K. SMITH & CO., R. 308 Dwight, Building, KANSAS CITY, MO., Distributors for Southwest.
THE ELLIS-PORRITT CO., 118 Fourth Street N., MINNEAPOLIS, MINN., Distributors for Northwest.

HANDY NESTED STOVE PIPE T JOINT

Saves 90 per cent of room.
Saves 75 per cent of freight
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long. Weighing 15 pounds. Made in Common, Polished Blue Steel and Planished Iron.

ASK YOUR JOBBER FOR THEM.

KINNE MANUFACTURING CO., - - - Minneapolis, Minn.

GILT EDGE FURNACE PIPE
and FITTINGS

FARWELL, OZMUN, KIRK & CO. GILT EDGE TRADE MARK.

Are designed to satisfy your trade and save you money. You could not begin to make these goods at anything like the price we offer them.

We manufacture Furnace Pipe and Fittings in large quantities—with expert workmen and strictly up-to-date machinery and are able to produce them at the minimum cost. **Better Write for Prices.**

Farwell, Ozmun, Kirk & Co.

CATALOG SENT UPON REQUEST ST. PAUL, MINN.

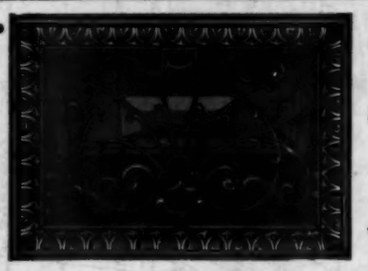
MONCRIEF
WARM AIR FURNACE.

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE CO.

6-8-10 Long St., Cleveland, O.

Sales Agent—J. C. KIMMEL, 2114 East 15th St., Kansas City, Mo.



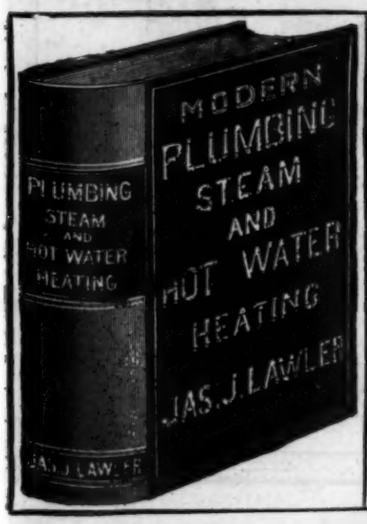
MUELLER
WALL REGISTERS

Simple
Durable
Quickest Installed
Greatest Capacity

We also make a complete line of Floor Registers. GET OUR PRICES.

L. J. MUELLER FURNACE CO.

191 REED STREET Established 1857 MILWAUKEE, WIS.



MODERN SANITARY PLUMBING
STEAM and HOT WATER HEATING.

AN Encyclopedia of Practical Plumbing and Heating Work. By JAMES J. LAWLER. 400 pages large octavo. Size 6x9 inches. ***Price $5.00.*** This book is practical throughout. Its aim is to impart information that practical men can utilize in earning their daily bread and butter. It is the ready key to problems arising in sanitary and heating work, and has already taken its place as a leading practical authority in this field.

FOR SALE BY
DANIEL STERN, 69 Dearborn St., CHICAGO.

FURNACE MEN
THE Perfection Dust Trap and Ventilator

Catches all the Dust and Ventilates the House.

Increases your business and satisfies your customers.
Can be attached to any furnace.
For particulars write

DAVIS & WALCOTT
Manufacturers, ATCHISON, KANSAS

The agency for a genuinely good furnace, whose makers take just as *much interest* in having it *properly installed* and its *users satisfied* as they do in selling it, is a business *connection worth something.*
Good furnaces and good furnace work are getting *more* and *more* popular every year.
The field is a big one.
If weary of the "lowest bidder" kind of furnace business, write for information about the unequaled *Round Oak Furnace.*
Your inquiry will be welcome and our best *reason why* you should secure the sale of the Round Oak Furnace and build an enduring, satisfactory furnace business, will be WHAT OTHERS HAVE DONE.

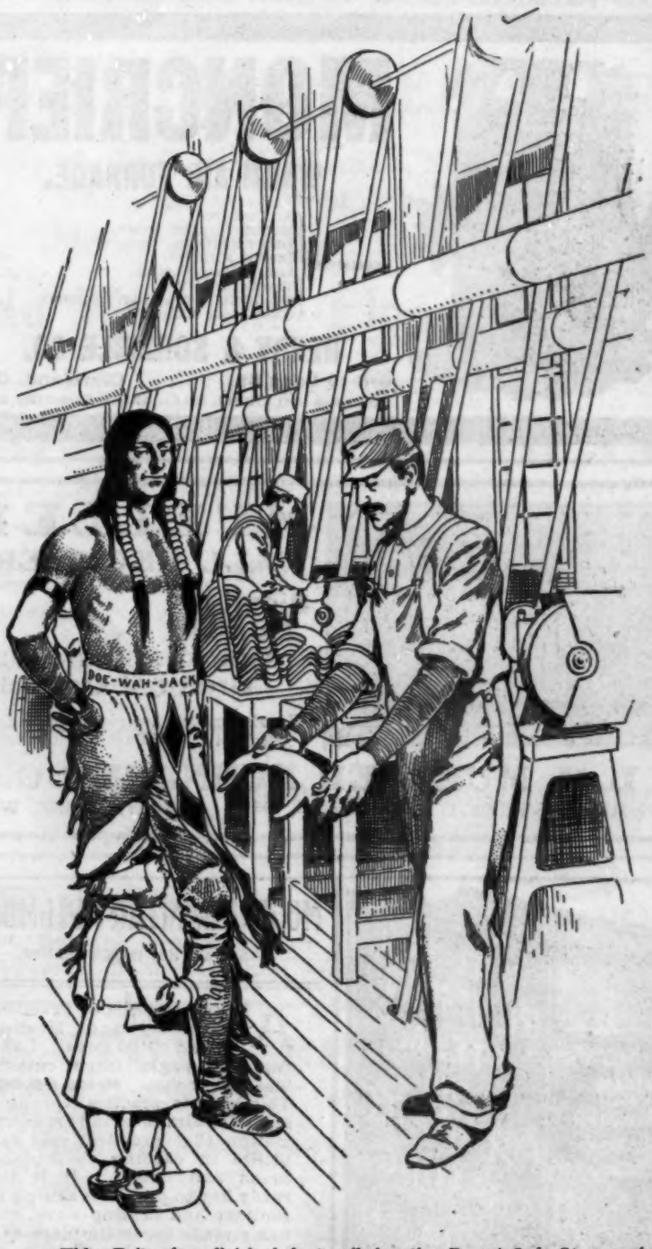
Estate of

P. D. BECKWITH

Fred. E. Lee, Manager

Dowagiac Mich.

MAKERS OF GOOD GOODS ONLY



"This, Fritz, is a finished foot rail for the Round Oak Stove and is probably the finest nickel-plated work produced in this country."

ESTABLISHED 1880.

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, JUNE 17, 1905.

THE LOWER Court of Louisiana has upheld the trading stamp law in that state, and it is now necessary for stamp companies of that state to pay $5,000 to the city and $5,000 to the state in order to transact business legitimately.

DURING the year 1904, Germany exported cutlery of various kinds to the amount of 206,750 cwt. or 22,732,500 lbs. In 1903, 176,304 cwt. were exported and in 1902, 136,644 cwt. The importation of knives, scythes, sickles in 1904 were about 200 lbs. in excess of the importations of the same articles in 1903.

DURING the calendar year of 1904, 1,900,000 dollars' worth of iron and steel products were exported from the United States into Japan. Japan's exports into the United States during the same year, consisted principally of luxuries including silk and tea, porcelain, matting, etc., but nothing which could be classified under the head of iron and steel or hardware. Between the year 1894 and 1904 the increase of imports from the United States into Japan was 431 per cent, while the increase of exports to the United States was 135 per cent.

THE Southeastern Freight Association published on June 8 special reduced rates on stoves and hollow ware from Birmingham, Ala., to points in Georgia. The new schedule gives Birmingham a decided advantage over Atlanta, and other points in Georgia where stoves are manufactured or jobbed. These new rates are very similar in principle to those recently adopted by the railroads running from Nashville, Tenn., to Georgia and which it was stated enable the Tennessee stove founders to compete with the Georgia founders in the latter's own territory. Differentials in favor of Atlanta, against Birmingham, have been reduced to 6c and 9c in some instances, and as low as 2c and 3c in others, although Birmingham is 171 miles farther away from these points than is Atlanta. In addition to this advantage the Birmingham foundries are located right in the midst of the raw material district. Under the new rate stoves may be shipped from Birmingham to Augusta at 30c in carload lots and 45c in less than carload.

WE WELCOME the initial number of the Bulletin, published by the Chicago Commercial Association, 77 Jackson boulevard. This association was formed in October, 1904, by some of the most influential and wealthy men of the city. It is a congregation of conservative business men for the purpose of extending the trade relations of Chicago and keeping the city in line with its reputation for commercial astuteness and for the betterment of its civic life. The association aims to promote the greater development of Chicago's commerce at home—and abroad; a supreme respect for law and order, leading to the higher standard of municipal character through the organization of all concerned into an aggressive force.

THE action of the Amalgamated Association of Iron, Steel and Tin Workers in deciding to press their demands for a 22 per cent increase in tin plate wages, beginning with the first of next month is an ill-advised and rash move. This advance is about equivalent to the reduction which went into effect about a year ago so that the employes are merely demanding the wages which were in effect before the reduction. But, inasmuch as the tin plate stocks are over abundant at the present time, and inasmuch as only one-half of the tin plate workers in the country belong to the amalgamated association, it would seem that there is no likelihood of the employers acceeding to their demands. Moreover, it is to be noted that the heavy season for the manufacture of tin plates is about over, and that manufacturers ordinarily shut down a large percentage of their plants during the summer. It is expected that the leading producer will close up all of the union shops and use merely the non-union, this contemplated action having been induced by the announcement that the union employes were about to strike.

RESOLUTIONS passed at the recent meeting of National Association of Manufacturers held at Atlanta, Ga., had a ring to them which spoke volumes for the unswerving determination of this strong organization of employers to continue and perhaps augment the fight against the closed shop.

Chicago afforded them a powerful and present illustration of the steps which the more vicious of the trades unions will take in enforcing their supposed rights. Most of the discussions at the Atlanta convention tended to drive home the one paramount principle that the wage earner has a right to work and live, to earn as much or as little as he is capable of earning by working whenever and for whomsoever he desires. Whether an employer desires to employ all union men, all non-union men or a mixture taken from the ranks of both, is a matter which ought to concern him alone. Personal liberty is a cardinal American principle. It is just as ridiculous for the walking dele-

gate to give some men permission to earn a living and deny that right to others as it would be for him to command all citizens to wear straw hats in winter and kill all who refused.

FROM a recent dispatch of U. S. Consul Muench at Plauen, Germany, we learn that the relations between employers and employes seem to be more harmonious in Germany than in the United States. Strikes are said to be less frequent and far-reaching, and on the whole, more peaceful. The consul states that Germany now stands in the front rank of those nations in which the law-making powers have striven to ameliorate the conditions of the industrial classes by means of systematized investigation and consequent legislation. Aside from the laws on factory inspection and sanitation, infant labor, insurance against sickness, accident, and for a pension in old age, certain industrial communities have now inaugurated a scheme of insurance against non-employement.

Measures of this kind are apt to creat a great deal of confidence in a government and instant quelling of any disturbances which may accompany strikes, tends to create the proper respect and fear for the police. In the United States, on the other hand, the tendency seems to be for less paternalism on the part of the government and marked lethargy in the maintenance of order.

IN A recent communication, U. S. Consul E. T. Liefeld, Freiburg, Germany, states that a new apparatus, called "The Murray," has been invented and operated successfully, with the purpose of attaching a keyboard of a linotype machine to the telegraph wires, and thus setting up type without human aid. By means of this machine, a telegraph operator in New York can set up lines of type in Chicago, arranging them in the form necessary for printing, by merely twitching the little key by which messages are sent over the wires. This invention will save the time consumed under the present system in copying the message after it has been received by the telegraph company, and the time which the linotype machine operator consumes in operating the linotype keyboard.

Of course this new system would be entirely valueless to country newspapers, and to papers which as a rule get along without the assistance of the telegraph office at all, but it is immensely valuable to the great metropolitan dailies and to papers in the printing of which every moment counts for the ordinary hour. For instance, in some of the recent publications of THE AMERICAN ARTISAN, it has been found necessary to set up 450,000 ems of brevier type, or 75 ordinary pages between 3:00 p. m. in the afternoon and 6:30 p. m. at night. This type is then gotten together, placed in the forms and arranged in the order in which it is finally to be read by the readers inside of four hours. The rapidity with which this work has to be done, can only be appreciated by a person who has actually seen the methods employed. Every minute, every second, is filled with the utmost possible value, and thought and action are one process.

The ambition of a newspaper man's life, and in fact, his one prevailing thought, is to see that the publication which he represents is sent to the readers on time. THE AMERICAN ARTISAN has never failed in this respect during the past, and we have no fears on that score for the future.

With this new invention, however, the Murray system of printing by telegraphy will save at least three hours of the time now occupied by the telegraph operators and the linotype operators in transcribing the original copy. This will be an immense saving to all of the more progressive papers, in fact, a saving approximating 75 per cent. The system has not been installed successfully in this country as yet, but it is hoped that the American public will soon receive the benefits of this great invention, and we assure our readers that in case a practical machine is developed, THE AMERICAN ARTISAN will be one of the first to offer its readers the many advantages which the system entails.

Garnishment Legislation.

THE EFFORTS to bring about the enactment of a more stringent credit law were crowned with victory recently when Governor Higgins of New York signed the Saxe bill.

This new law provides that whenever property shall be purchased on credit by the aid of a statement in writing relating to the purchaser's means or ability to pay, the purchaser shall at any time within ninety days after the expiration of the term of credit upon request of the person from whom the property was furnished, produce his books of account upon which the credit statement was made; failure to produce such books to be presumptive evidence of fraud in the statements made in obtaining the credit.

In more neighboring territory, however, a bill decreasing the garnishment exemptions in Wisconsin was vetoed by Governor La Follette. His action was based upon the conviction that under the new law protection would be removed from the workingman—protection honestly due. The veto in part was as follows:

I herewith return, without approval, bill No. 48A, relating to exemptions.

Section 5 of this bill amends subdivision 15 of Section 2982 of the Statutes of 1898, so as to read as follows:

"15. The earnings of any person or persons having a family dependent upon him or them for support, at the time of the commencement of proceedings for the collection of the debt for three months next preceeding the issue of any writ of attachment, execution, garnishment or the institution of proceedings supplementary to execution to the amount of $60 only for each month in which such earnings are made or earned; providing such earnings shall not exceed $180 in all for said time, including such part or share thereof had by or paid to the debtor during such three months, provided, further, that no part of such earnings in excess of $30 made or earned in any one month during said period of three months, not exceeding $90 in all for such time, shall be exempt as against liabilities hereafter contracted for any life, sold to any such person or persons or furnished to his or their families under circumstances which render such person or persons liable in the law therefor."

OPPOSED TO REDUCTION.

The sections as amended contain a further proviso, but it is unnecessary to repeat or comment upon it here. It will be seen that the exemption established by the present law of $60 a month for three months is practically reduced by this bill to ninety dollars. I cannot approve of such reduction.

It is apparent that under the provisions of this bill a widely different result might follow. It would be difficult, indeed, to enact a law which would compel the debtor to be prudent. For the good of the state the laws should be framed to protect the imprudent, as well as the prudent. Indeed, the theory of the exemption law is to protect the latter. Those suffering misfortune from whatever cause, are to be cared for in preserving the best interests of the state. It can readily be seen that entire exemption now provided by law for the wage-earner might be consumed in the discharge of an indebtedness to the doctor, the nurse, the druggist.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

The banquet, recently tendered at Virginia Hot Springs by the American Hardware Manufacturers' Association to the Southern Hardware Jobbers' Association and their guests, strikingly illustrates a factor which is sometimes overlooked in the competition of life—the value of well-regulated, co-operative effort as opposed to individual, unassisted effort.

It has been said that a single blockhead is of more avail at the head of an army than the wisest body of generals. Whether this statement is true or false depends altogether upon the mental fabric of the different units composing the body. If these are held together by well-systematized regulations, if they respond ably to every demand of a strong, self-possessed and resourceful manager, if they work together as one whole, rather than as a disjointed number of individuals, then there is little doubt but what the council is not only of more advantage in war and peace than the insipid general, but that it will conduct an immensely better campaign than the *best* single leader.

The reception committee of the American Hardware Manufacturers' Association is an example of the ideal council formed for the purpose of accomplishing one end and bringing the purposes for which it was formed to a successful and gratifying fruition. The chairman was Henry B. Lupton. Each member of the committee realized this fact, though Mr. Lupton's stand was not assuming, was not officious or self-assertive. Under his tutelage the different members each performed their parts without friction, and without discord. Each man was assigned a part; each part was assigned its manager. While to Henry B. Lupton must be given all credit for the successful execution of the plans laid down for the banquet, he would not have succeeded so admirably had it not been for good team work, for the fact that he had able lieutenants behind him all working in unison.

Henry B. Lupton has an exceedingly fortunate disposition. Quietly working along lines laid down according to his convictions, never swerving from the path which he had plotted out at the beginning, firm in his own faith, modest, simple, unaffected—such is the man who managed the most successful banquet ever tendered by a hardware association of America.

While I wish Mr. Lupton all manner of success, all health and happiness, I regret most exceedingly that this notice is somewhat in the nature of a post mortem. Mr. Lupton has resigned from all committees. He will in the future be connected with none of the committees with which he has worked so nobly in the past.

It is impossible to congratulate Mr. Lupton too profusely upon his association with the entertainment branches of the association. It is impossible to sympathize sufficiently with the committees which are thus bereft. His efforts have given a bright halo to the memory of every important work with which he has been connected. His resignation is regretted by all who have ever attended a hardware convention during the last few years.

As announced in another section of the paper, Mr. Lupton's work will be carried on in the future by a committee or series of committees, known as the convention committees. One committee will be appointed by each of the three associations. These cabals are composed of able men—perhaps the best representatives of the organizations of which they are members. They have a noble and successful example behind them. It will require arduous, faithful and relentless effort, combined with natural talent and educated ability, to excel or even rival the banquet of June, 1905. Let us hope, however, that as the watchword of the hardware associations, the country and the human race is *improvement*, so also our banquets will keep pace with other festivals and other ideals.

* * *

I learn from Oklahoma City that the door of Petee's hardware store was found unlocked at a late hour Friday. The police inquired about it and expressed the opinion that nothing had been stolen.

* * *

Most people, and I am one of them, believe that on the whole the iron and steel industries occupy a sphere which, in the eyes of the world, ranks second in importance to none. Iron and steel men are universally recognized as the ablest, the most progressive and most aggressive of the world's finest.

Hardware is one of the most important, if not the most important, branch of this industry. More capital, more perseverance and more ability have been expended toward the improvement of this craft than perhaps any other.

The ability of hardware men has been recognized quite generally in the political world. Moreover, these political offices have been obtained for the most part without the solicitation of the candidate, and in spite of his apparent indifference.

The case is strikingly illustrated by the recent appointment of Hugh McCaffrey, president of the McCaffrey File Co., Philadelphia, as a member of the advisory staff recently named by Mayor Weaver. This body will have a powerful influence in shaping the policy of that faction-beridden municipality. Mr. McCaffrey's selection was significant. He was the only Democrat of the fourteen members appointed. He was appointed by a strongly Republican mayor and in spite of the fact that he has heretofore evinced no political tendencies and no desire for office.

Mr. McCaffrey is to be most highly congratulated upon this sign of appreciation. His city is to be congratulated upon the presence of such an able man in the mayor's advisory board. The hardware trade is to be congratulated upon this additional evidence of the marked esteem with which members of their craft are regarded the world over.

News Siftings

MEETINGS.

Pacific Coast Hardware & Metal Association—Monterey, Cal., June 19-21. Headquarters, Hotel Del Monte.

Rhode Island Hardware Dealers' Association—June 22.

Arkansas Retail Hardware Dealers' Association—Little Rock, June 21-23. Headquarters, Gleason's Hotel.

American Society of Heating and Ventilating Engineers', Chicago, July 7 and 8.

Retail Hardware Implement & Vehicle Dealers' Association of Oklahoma—Oklahoma City, July 10.

Michigan Retail Hardware Dealers' Association—Saginaw August 9-11.

National Hardware Association—Washington, D. C., November 15, 16, 17.

American Hardware Manufacturers' Association—Washington, D. C., Nov. 15, 16, 17.

It is said that J. C. McDermott & Co., Braintree, Mass., have recently added a line of ranges to their already complete stock of plumbing supplies.

The Judson A. Tolman Co., 66 Lake St., Chicago, have increased their capital stock to $100,000 and are commencing to manufacture their line of Tolman steel ranges in Grand Crossing, Illinois.

Earl B. Coulson, formerly manager for A. J. Lindemann and Hoverson Co. of Milwaukee, and before that with Cribben & Sexton Co., of Chicago, will occupy the position of general manager for the Canton Stove Manufacturing Co., recently formed at Canton, O.

Henry Gleason, 259 Broadway, New York City, is an extensive dealer in hot and cold rolled hoop, strip and bar steel, nickel-plated steel stove edges and open hearth steel billets. This well-known firm sells also brackets to be placed under warming closets, ornaments and lifters, tubing, corner irons, oil and gas stove domes, feet, rings and sections—in fact, everything in the line of steel range trimmings.

The tenth annual convention of the American Foundrymen's Association was assembled at the Grand Central Palace, New York City, at 10 o'clock, June 6th. A number of interesting papers was read including "Things Needed in the Foundry," "A Successful Foundry Combination" and "Fan Blower versus Positive Pressure Blower." On Wednesday Wm. H. Perry offered an interesting talk on "Foundry and Pattern Stop Standards." He was followed by H. M. Lane, who spoke on "Care and Storage of Patterns." The election of officers for the ensuing year resulted in the election of Thomas D. West of Sharpsville, Pa., president; Dr. Richard Moldenke, of Watchung, N. Y., secretary and treasurer. The next convention will be held in Cleveland.

BARLER HEATERS.

It is commonly known that under certain recurring conditions, oil "crawls over" the wick tubes of oil-burning stoves, and unless some provision is made, runs down the inside of tubes and evaporates, creating a smell of oil.

The A. C. Barler Mfg. Co., 104-106 Lake St., Chicago, claim that the stoves which they are at present offering to the trade are odorless—not in the common acceptation of the term as applied to oil stoves, meaning not quite odorless—but absolutely so. In giving a reason for superiority in this respect, attention is called to the double construction of the Ideal wick tubes, which serves to catch and draw back into the wick any oil that crawls over them.

Moreover, it has sometimes been said about oil

No. 12. No. 10. No. 6.

stoves, that they work well at first, but not after having been used a few weeks. In the Barler heater the burner parts are simple and substantial, easy to get at for cleaning and rewicking. It is pointed out that brass is the most suitable metal for the construction of those parts which come in contact with the oil, and that experience has shown a fount or burner made all or partly of steel, iron or tin, must necessarily, from the action of the oil on such materials, have a short life.

As a practical demonstration of the lasting qualities of Barler heaters, the company are using in their own office one of the heaters they made fourteen years ago.

The accompanying illustrations show some of the

No. 5. No. 4. No. 3. No. 50.

different styles in which these heaters are made. They are made in sizes to meet all requirements and fulfill every special need.

A special feature of Nos. 10 and 12 is the inside hot air circulating flues which come in contact with the fire at its hottest part. These flues draw cold air from the floor, which is heated as it passes over the hot surfaces and is rapidly distributed throughout a room, warming the whole space quickly and evenly.

As shown, Nos. 4, 5 and 6 are furnished with handles and have, besides, rollers on the feet, making them convenient for moving about the house, or wherever extra heat is needed at the moment.

No. 3 is, in a general way, like No. 4, but less ornamental, and lacking the rollers.

No. 50 is especially designed for bath rooms and small bedrooms, or for heating any small space where a light, portable and low-priced heater is wanted.

Catalogues will be furnished upon application. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

Private Brands

The question of the employment of private brands by hardware jobbers, instead of the regular brands used by the manufacturers themselves, has been agitated more freely of late than ever before. As a rule we find that manufacturers and retailers are solidly opposed to their use.

TO THE AMERICAN ARTISAN.

I should like to add my share to the discussion of the question, "Jobbers versus Factory Brands," and you will pardon me and overlook the seeming egotism of the writer when he says that to his mind this discussion appears to him as the most fruitless, unnecessary and uncalled for one that has yet been discussed in a trade paper. Why should there be any discussion of a matter, the solution of which rests entirely with the buyer? There is no law to compel any dealer to purchase a jobber's brand, none to prevent his buying the maker's if he prefer, then why should you open your columns to belittle and destroy the results that ability, foresight and remarkable business acumen have created. Is it on the principle that you are your brother's keeper? and that you believe that he needs enlightment? Perhaps some do, but I venture the assertion that those retail dealers who are making a distinctive success with a high grade jobber's brand are not *the ones* who need it, and as you can generally find the two kinds in every community, the one with jobber's brands, the other with factory brands, it seems to me their local field is the battle ground to fight this battle, the weapon, *publicity*, and the result depending upon the quality of goods in the user's hands. It appears to me that back of this discussion is an attempt to injure the business of some great jobbing house, whose remarkable success with marketing a world known trade-mark brand of goods does not call out the enthusiastic approval of some competitor or competitors, and if such is the case, they are using your paper as the medium and the retail dealer as the author to do for nothing what they should spend their good money for to combat in public manner their right to public recognition. This would be of some practical benefit to those retail dealers who feel that their salvation depends on maker's brands. Let them follow the leader by spending money for publicity as their competitor has done and not depend for success upon the cheap and under-ground method pursued.

If I could get exclusive sale of one brand of jobber's goods I have in mind, I would care nothing for price paid and make the success of my business life by the energetic use of printer's ink in calling attention to the fact that I had this line. You will understand that I discuss this from a retailer standpoint. With the manufacturer's and jobber's end I have nothing to say.

In kindest spirit imaginable, I subscribe myself.

F. NEUDORFF.

TO THE AMERICAN ARTISAN.

While we do not care to have our named used in any article that you publish in connection with the matter of private brands, we are pleased to give you our idea pertaining to it.

Our experience has been that the material and price that has gone into the jobbers' brands of goods has not been either as good in material or as good in price as we were able to get from the manufacturers direct, in almost all cases. We also think that the standard manufacturers' brands sell better than jobbers', which you are able in a great many lines of goods to get an exclusive agency and work up a profitable trade for yourself, but if you handle the jobbers' line their salesmen are so eager for business that they will sell to every one in a town if they have an opportunity to and then customers have an opportunity to make comparison on the same identical article, which we do not believe is advantageous to the dealer. We have always felt like giving a much stronger guarantee on goods bought direct from the manufacturer than the jobber, as we have an opportunity of sending the goods direct to the manufacturer and learning their cost promptly and directly, and if they were bought through the jobber there is no telling who made them or when we would get a satisfactory adjustment if goods were taken back and others given in their place.

Lastly, we will say that we do not feel at all favorable to jobbers' private brands. If we cared to work up any other item in the manufactured line we most certainly would get such goods as we were able to brand with our own name on and sell them under our own personal guarantee, which we believe is very much better than through a second party that does not manufacture them.

"B."

TO THE AMERICAN ARTISAN.

I am unfavorable toward jobbers' private brands. I think the practice of guaranteeing tools by any manufacturer should be abolished. It is a perfect nuisance to guarantee goods, for when the customer gets tired of the same, he puts them to an unfair use and returns them and calls for a new article. No jobber expects to handle goods under his own private brand, unless he makes more on these goods than he makes on those of the manufacturers' brands.

If you desire to use this letter I do not care to have you use my name, if you don't think you can use it without using my name, advise me at once, and I will give you my reasons.

"HARDWARE."

TO THE AMERICAN ARTISAN.

As a rule we have more confidence in the makers' brand of goods than we have in the jobbers' brand, and generally speaking, the trade has more confidence in same, and we believe that the manufacturer gives a better appearance to his goods than they do to the jobber's private brands.

The manufacturers as a rule have their goods better introduced and better before the people than the jobbers' brands, consequently they are easier to sell.

We don't see how the manufacturers can put up extra brands, extra boxing, extra stamping, etc., and then allow the same material and workmanship to go into the jobbers' brands that they did their own brands.

The margin of profits secured on either manufacturers' or jobbers' brands depends on the amount of protection that either will give the retailer. If the manufacturer or jobber either permits their special brands to be sold to everybody in town, there will soon be a low margin on either of them.

We get a stronger guarantee from some jobbers than we do from others, but the manufacturers' brand, as a rule, does not need to be guaranteed so much as the jobbers.

We believe that right here is where the jobbers fall down on their own private brands of goods, changing from one concern to another from one factory to another, thereby getting their goods so mixed that they cannot tell who manufactured them. We are privately opposed to such a proposition as that.

As a whole, we are not very enthusiastic over the jobbers' brands, and we have got more manufacturers' brands, standard brands, than any other hardware store of the size in the state. Yet we think a great deal of our jobbers and patronize them as extensively as we possibly can, and we know that they make more off of their private brand of goods than they do of the manufacturers' brands, or they would not push them so.

"S.-T. Hdw. C."

The Hardware Record.

American Hardware Mnfg. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., C. W. Asbury, Philadelphia, Pa.; Geo. W. Corbin, New Britain, Conn.: Henry B. Lupton, Pittsburgh, Pa.
Sec.-Treas., F. D. Mitchell, 309 Broadway, New York.
Ex. Com., W. M. Taussig, New York; Sam'l Disston, Philadelphia; Wm. H. Hays, Pittsburgh; John E. Harbster, Reading; Geo. P. Hart, New Britain; W. M. Pratt, Greenfield, Mass.; E. G. Buckwell, Cleveland; E. B. Pike, Pike, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., Hamp Williams, Hot Springs.
1st V. P., T. B. Stewart, Newport.
2d V. P., R. P. Graham, Fordyce.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com., J. E. Maxey, Ozark; J. A. Plummer, Marianna; R. P. Allen, Van Buren; J. L. Davis, Magnolia, one year each; Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville; J. M. Pittman, Prescott, two years each.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Giessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Ray, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V. P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec.-Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; R. J. Breckenridge, Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C. Frederick, Owenboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. B. Sperry, Port Huron.
V.-P., Geo. H. M. Towner, Muskegon.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan; John Popp, Saginaw; W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson St. Peter.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. S. Wright, Omaha; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; P. E. Strauss, Boston.

Nebraska Retail Hdw. Dealers' Assn.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A. H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walther, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H. Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A. L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer Dayton, C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hardware Association.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J. E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, McKees Rocks; Geo. V Thompson, Mt. Jewett, Pa.; George L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft. Smith, Ark.
1st V.-P., J. S. Warren, Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville, Fla.
Sec.-Treas., C. B. Carter, Knoxville. Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove.
Secy. & Treas., J. W. McManus, Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T. T. Clark, Ennis: H. S. Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Marcos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine: H. J. Krueger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 34 to 39 inclusive.

G. F. Augustus, G. V. Norman, G. A. Stewart are the incorporators of the American Tool Co., Louisville, Ky., capitalized at $50,000.

The entire plant of the North Wayne Tool Co., North Wayne, Maine, was destroyed by fire recently, causing a loss of $25,000. It is expected that the plant will not be rebuilt at its former site.

The Blacklock Foundry, South Pittsburg, Tenn., manufacture sad irons made in sizes to suit all requirements, from one to twenty pounds. These are finished in black, bronze, aluminum or nickel.

O. Katzenburger, A. Dress, O. Koeler, E. A. Elmendorf and R. L. Ball are the incorporators of the American Keyless Lock Co., of San Antonio, Tex., capitalized at $50,000 for the manufacture of locks.

A fire occurred on June 12th in the implement warehouse of O. M. Scott & Bros. at Marysville, O. The building was completely destroyed. The loss will reach several thousand dollars, partly covered by insurance.

The Lutter and Jacobi Co., Milwaukee, Wis., have been incorporated with a capital stock of $18,000, to manufacture and deal in hardware specialties. The incorporators are L. N. Jacobi, O. J. Lutter and Willard K. Bush.

The Inland Empire & Implement Dealers' Association, Spokane, Wash., regarding which so much has been heard in hardware circles during the past six months, has voted to join the National Retail Hardware Dealers' Association.

Several of the creditors of the firm of Lang Bros., Manchester, O., who assigned on June 8th, have filed in the United States court a petition to have the concern declared bankrupt. The petitioners represent claims aggregating over $2,000.

The Vrooman sanitary sink strainer is meeting with the same success which characterized its inception. This strainer is said to bring cleanliness, health and happiness. The manufacturers are F. H. & E. B. Vrooman, 325 Dearborn street, Chicago.

W. C. Copeland is president, Charles H. Shick, secretary, and Frank Audre, treasurer, of the Burlington Lawn Trimmer Co., Burlington, Ia., incorporated for the manufacture of lawn trimmers. The output will be ready for delivery on June 20th.

Benjamin S. Alder Co., 37 Warren street, New York, are manufacturers' agents representing lines included by hardware and tools. Benjamin S. Alder is the president and treasurer, Wm. W. Crowell is vice-president, and James A. Tongue, secretary.

It is announced that B. P. Elwell, for the past two years treasurer and manager of the W. T. Deckert Co., Dubuque, Ia., has resigned his position with that firm to accept the assistant managership of the Hurty-Simmons Hardware Co., of Minneapolis, Minn. Mr. Elwell is widely known to the hardware trade of the West, and the past ten or fifteen years has been con-

nected with Schreiber, Conchar & Westphal, Dubuque, Ia., with Farewell, Ozmun, Kirk & Co., of St. Paul, and with other widely known concerns. The Hurty-Simmons Hardware Co. is one of the largest of the branch houses, recently organized by the Simmons Hardware Co., of St. Louis.

On June 15th the Chicago Hardware Fdy. Co., North Chicago, Ill., one of the largest hardware manufacturing establishments in this part of the state, was visited by fire, seemingly of incendiary origin. A loss of $15,000 was entailed, fully covered by insurance. The carpenter shop, quartermaster's shop, flask storage house and half an acre of flasks for molding were destroyed.

It is understood that a retail association of hardware dealers was formed in South Carolina on June 14, 15. A gathering at Columbia was held and about fifty dealers were present. Secretary Corey of the National Association was invited to be present but was unable to accept the invitation because of a previous engagement. A most successful and promising meeting was held, however, and the outlook for the future is most hopeful.

In addition to the increase in capital stock which recently took place in the Cutler Hardware Co., of Waterloo, Ia., the managers of that firm now announce that they have absorbed the stock and good will of the Norris & Loring Hardware Co., Cedar Rapids, Ia. The latter concern have been in business for about fifteen years as a wholesale and retail institution. For the past three years, however, they have been doing a wholesale business exclusively. C. M. Loring of this concern has taken some of the stock of the Cutler Hardware Co., and will temporarily assume an active part in its management. The direct management, however, of this concern will remain in the hands of their aggressive and astute president, F. E. Cutler. It has been the policy of the Cutler Hardware Co. to issue to its employes a share of the total capital stock, and in this way have them contribute in a co-operative way toward the profit of the organization.

At a recent meeting of the St. Louis Credit Men's Association the following officers were elected unanimously: L. D. Vogel, president; I. B. Jacobs, vice-president, and Geo. B. Miller, treasurer. It was decided to secure a special car for a party of about thirty to visit the tenth annual convention of the National Association of Credit Men, which was held at Memphis, Tenn., on June 14, 15, 16. The purposes for which this association was founded are praiseworthy. They are enumerated as follows: To unite credit men for the protection of mercantile credit; for diffusion of ideas regarding proper granting of credit; to induce legislation for the promotion of honesty in business; to obtain improved service from mercantile agencies; to prosecute fraudulent failures, and guard against imposition; to establish closer ties between business men, as well as between them and their customers; to aid by precept, example and counsel in removing causes that lead to financial failure; to assist in establishing uniformity in business customs and laws; to promote the interchange of credit information.

AN EDIFYING DISPLAY.

In accordance with the announcement appearing in the last issue of THE AMERICAN ARTISAN, a practical and interesting talk on salesmanship was given on Wednesday night, June 14th, in the display parlors of the Robeson Cutlery Co. and Rochester Stamping Co. at the Palmer House, Chicago. A goodly gathering of enterprising hardware men was on hand to imbibe the helpful suggestions with which the talk was infused. Methods calculated to stimulate interest on the part of customers and arouse enthusiasm were strongly advocated and exemplified.

H. W. Beegle is the popular Chicago representative of these concerns. Mr. Beegle is a pioneer in the art of advertising in its broadest sense, and as a man who can arouse the purchasing instinct of an individual through ingenious window display, well-worded advertisements and soul-warming affability, he has perhaps few equals. There are not many mortals who are better fitted to put retailers in a position to get trade than Mr. Beegle.

One of the lines which this enterprising gentleman represents is the Shur Edge cutlery. The worth and selling qualities of this brand are famous, but as additional inducements to help along the sales of the retailer, Mr. Beegle is donating free of charge with each substantial order a set of display stands. These stands are made of cardboard and rolled paper, finished to imitate wrought iron. They are cleverly arranged, with the prices, at which the dealer wishes to sell, printed upon the display board.

He is dispensing likewise an outside show case—cylinder form—water- and moisture-proof, which is to be seen in front of many a hardware store, showing Mr. Beegle's popular line.

Handsome plush cases for the counter, announcement cards, and Forceful Hints (a paper purporting to be published by the dealer every now and then) are only a few examples of the enterprising methods used in the distribution of Shur Edge cutlery.

The line includes scissors, table cutlery, butcher knives, razors, hones and strops, shears and pocket knives. Mr. Beegle handles in addition a very choice assortment of chafing dishes, made to suit every pocketbook and every difference of taste.

Additional information will be supplied by H. W. Beegle, 234 Baird St., Chicago. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

THE ARKANSAS PROGRAM.

A handsome program announcing the procedure at the annual meeting of the Arkansas Retail Hardware Dealers' Association, to be held at Little Rock, Arkansas, on June 21, 22 and 23, has just been issued, and is being distributed to the different hardware dealers of the state.

A very desirable feature of the program itself is the appearance on its pages of a number of the questions to be asked and answered during the convention. The publication of these questions in advance of the meeting is a praiseworthy action, giving the members

more time, as it does, to consider the nature of the topic and prepare a more intelligent answer.

A railroad rate of one and one-third for a round trip has been granted by the railroads. Tickets should be secured on the certificate plan.

Many representatives of the manufacturing and jobbing interests will be present. M. L. Corey, secretary of the National Retail Hardware Dealers' Association, will help to enliven the occasion, and numerous live and able papers will be read.

THE BEST OF RECORDS.

Every man who has attended any of the hardware conventions of the past few years, will hear with regret that H. B. Lupton, vice-president of the American Hardware Manufacturers' Association, and until recently chairman of the reception committee, has resigned from all the committees of that association, and will not in the future have charge of any of the banquets or entertainments. Mr. Lupton's work had been supremely successful and his resignation is universally regretted. Vigorous but futile efforts were made by the other members of the association to restrain Mr. Lupton from his course.

In the future the banquets and other entertainments will be in charge of what will be known as the convention committees. The convention committee representing the American Hardware Manufacturers' Association will consist of Charles W. Asbury, chairman; N. A. Gladding and Joseph Hottel. The Southern Hardware Jobbers' Association will be represented by Charles E. Ireland, chairman; G. F. King and Frank Dunlop. W. W. Supplee is chairman of the committee representing the National Hardware Association and J. A. McKee and T. J. Fernley are the other members.

THE YEARLY PICNIC.

The eleventh annual picnic to be given by the Chicago Retail Hardware Association will be held at Alton Park on Wednesday, July 19th. Special trains will leave the Union Station, Canal and Adams Sts., at 9:15 and 11:00 a. m., returning at 7:00 and 8:00 p. m. As usual, there will be games, dancing, prizes, target shooting, baseball and races for young and old, men and women.

The arrangement committee is headed by the ever-jovial A. J. Englehardt as chairman. Hans Fehr is the treasurer, and the energetic, popular Fred Ruhling is secretary. The stalwart Martin Englehardt and our mutual friend, S. J. Koehler, form the rest of this able body.

The world-renowned Alderman Smith heads the transportation committee; George Bartholdy, the committee on dancing; G. A. Englehardt, the committee on sports, and the enterprising president, H. E. Gnadt, is chairman of the target shooting committee.

G. R. Lott, though it is hard to believe, will rival Bacchus as chairman of the refreshment committee. The ever- ready "Pop" Bennett is of course a member of this most necessary cabal. "Pop's" name also appears as the powerful chairman of the prize committee, and still again, we discover that he is one of the judges of contest.

The arrangements are well nigh completed. A good time is promised for all. Woe to him who prefers isolation to joviality. Woe to the demon who sends down rain!

SELL THEIR BUSINSSS.

The Norris & Loring Hardware Co., of Cedar Rapids, Ia., have sold their business to the Cutler Hardware Co., of Waterloo, Ia. The stock will be removed to the latter concern about the 15th of next month. Negotiations for the transfer have been going on for some weeks, inasmuch as E. H. Norris, president of the Norris & Loring Hardware Co., has long wished to devote more of his time to the marketing of some valuable patents which he owns. One of these patents is the Never Slip nail puller, widely known to the trade, and constantly gaining in popularity. Mr. Norris also wishes to manufacture a safety blasting charger which has been pronounced by mining experts to be the only safe and practical machine on the market. Mr. Loring, of this concern, will go to Waterloo temporarily to smooth over some of the perplexing matters which naturally surround a deal of this nature.

It was at first proposed to consolidate these two Iowa jobbing houses, which cover about the same territory. Finally, however, it was deemed better for one concern to buy out the other. The consent of the stockholders was obtained without any difficulty.

OPENING FOR AMERICAN HARDWARE IN THE PHILIPPINES.

BY "EX-SOLDIER."

A SWEEPING CHANGE.

When I first went to the Philippine Islands, in 1898, the hardware people actually counted out the nails, screws and tacks for you by the dozen. So many nails for a penny and so on. To-day the customer can purchase nails, screws, bolts and other lines of general hardware on practically the same plan as in the United States, only on a much smaller scale and at higher values. The Chinese always carried hardware. They had enterprise long before the Americans arrived in the islands and they introduced hardware of Chinese make, hardware of Spanish origin and hardware from Germany. But the stocks were always scarce, and prices very high.

GOODS WERE QUESTIONABLE.

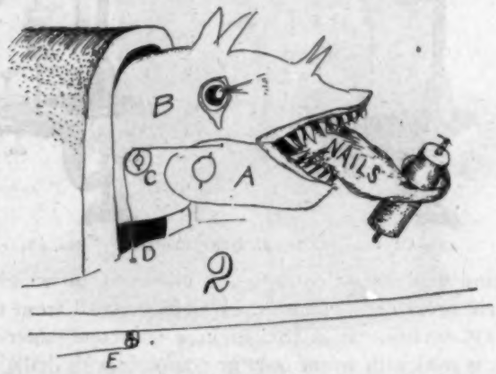
Worst of all the goods were questionable in many ways. The islands were the dumping ground for the manufacturers of the old world, and discraded, out of date, defective and inferior hardware from many sources found its way to the islands. I never purchased any hardware during the years 1898, 1899, 1900, 1901, 1902 or 1903 that was not underweight in package, short in numbers, and imperfect in many ways.

NOW CARRY HONEST HARDWARE.

I left the islands in the spring of 1904. At this time the Americans had secured quite a hold on the hardware business and the merchants of Manila, Iloilo,

Cebu, Cavite and dozens of other thriving and building commercial centers are carrying hardware manufactured on honest lines in the United States. You can buy a package gross of screws there now, and if you count the number will find full assortment. Two or three years ago you would have discovered a shortage in the count.

The shortage was due first to the original makers failing to put in the full count, and secondly, to the fact that the retailer had the failing of removing a few screws from each package without deducting the price of the same. It was the practice to fill little orders from full packages and then forget and sell the package as complete. If a customer discovered



the shortage, it was all right. Simply a mistake and the inquisitive patron would be given another package.

MUCH HAND MADE STOCK.

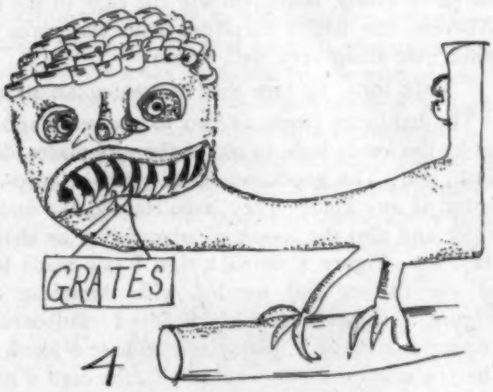
Hand made materials were many. Time is no object to the native or the Chinaman and he will utilize hours of his time hammering out nails, shaping hand made screws and bolts, even though but a few cents per day can be made that way. The hand made articles are not all correct. The threads on hand made bolts are exceedingly poor. The threads frequently strip. The hand made articles of all kinds vary in pattern, weight and character.

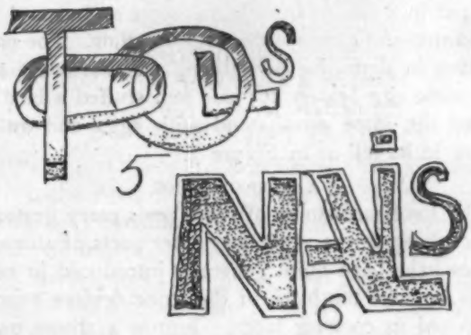
INNOVATION AT HAND.

I was in the islands between four and five years with the United States army, usually traveling from point to point, and had an opportunity to watch the progress of the hardware trade. As soon as the army began discharging its soldiers in the islands, with final statements and travel pay, many of these soldiers with their $300 to $700 "finals" went into business. Some of these men invested in hardware, as they could look forward to the coming needs of the islands.

CRUDE BUILDING.

They saw buildings in course of erection with the native plying the great wood pins to hold the timbers in place. They saw instances of using the split bamboo shreds to bind the boards and cross pieces together because of lack of nails, screws and bolts.





They observed entire buildings going up with only the hand made hardware of the country. The home made hinges were ponderous affairs, very crude and misshapen, because the native builders were unable to buy the proper kind. And so on through the entire building industry.

ARMY ENGINEERS STARTED DEMANDS.

The American army engineers, in the construction of quarters and barracks, began shipping in lots of nails in kegs, boxes of screws and bolts, cases of hinges and general hardware. The natives on the

work spread the news concerning this innovation, with the result that the independent native builders began inquiring of the Chinese and other hardware people for like supplies. Then the hardware market took a boom. Native workmen and carpenters who had been content to use strings and wires and wood pegs to hold a building together, now wanted wire nails of improved pattern, and screws of American make. "Americano" saws and other tools were demanded.

WHAT TO SEND.

The hardware and general tool makers of America frequently wrote to Manila builders, army people, and administrators, asking information as to the kind of tools and hardware needed. Plain tools are wanted. The patent back-action screw-driver is going to be an excellent tool for the native carpenter in five years from now, but for the present, just the plain, substantial screw-driver is all he can manage. The well-designed labor-saving tools are first class in every respect for the American carpenters of the islands, but are beyond the mechanical knowledge of the native who wants the plain tool, and is willing to use elbow grease and does not want to save labor just now. He will later on. I have seen them puzzle over the patent adjustable blade planes for hours, always getting the parts wrong, finally ruining the edge of the blade. Whereas, the native carpenter with the plain wood plane gets along very well indeed.

SOME IDEAS OF THE NATIVE HARDWARE MEN.

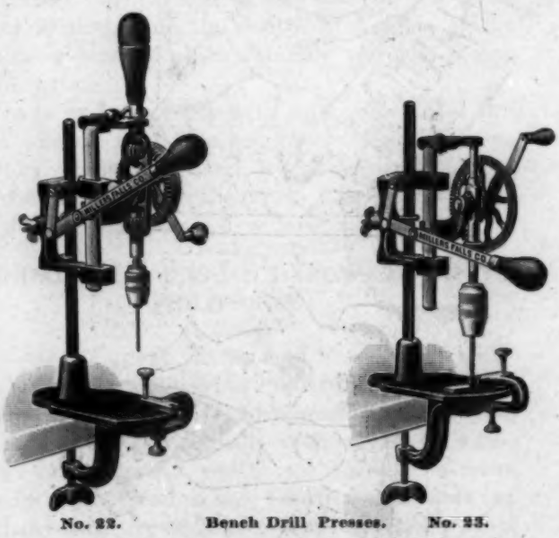
The hardware stores of two to six years ago were under the lonely huts, in out of the way places, dismal, dark, etc. The goods would be piled in heaps. No order of any kind. They have learned the lesson of order and also the lesson of advertising, as shown in the cuts. Figure 1 shows a sign I saw made by one of the natives and worded with American types. Figure 2 shows a reptile's head of cardboard projecting from a cave, with the head base *b* fixed, while the jaw *a* is caused to wabble with the cord *d* passing over the wheel *c*. This figure was made by a native and put in a box in front of his store and caused people to stop and examine the curious affair. The native believes in figurative advertising. A hardware store had some egg beaters for sale and stuffed a bird and placed the same on a stand with eggs and an egg beater in its bill as in Figure 3.

A GOOD OPENING.

The hardware stores of the islands carry grates for the cooking stoves as well as other parts of stoves, as stoves have been quite generally introduced in recent years, to take the place of the stone devices formerly employed in cooking foods. Figure 4 shows one of the ferocious head pieces made of wood by carving laboriously a week, I was told. There are wood engravers in Manila, and they make images of the hard woods for the churches. This figure head was made on the same plan, and decorated with bright red, green and yellow colors, making the affair quite hideous. Figure 5 is one of the types of monogram letters used by the native hardware man to advertise his tools. The letters are fret-sawed from wood, as also is the combination exhibited in Figure 6. I believe that there is a good opening in the islands for American hardware. I would send circulars there, to the hardware stores in existence, or to the postoffices of each town, asking the postmaster to please deliver the same to "leading hardware dealer." The Philippine postmasters are used to getting circulars of other countries, from manufacturers, addressed in this form, and nearly every request is complied with.

BENCH DRILL PRESS.

The Millers Falls Co., 28 Warren St., New York, are placing on the market the Bench Drill Presses, Nos. 22 and 23, shown in the accompanying illustrations. The No. 22 is of simple construction, and is made to meet the demands for a moderate priced, but effective drill. It is designed to be used in connection with the company's hand drills Nos. 1, 2 and 5, any of which make be attached to the frame in a very few seconds. The feed is supplied by a compound lever, which is convenient, sensitive and effective. The frame is of steel and iron, japanned. The distance between the chuck and table when hand drills Nos. 1 or 5 are used at highest point is 7¼ inches. When



No. 22. Bench Drill Presses. No. 23.

hand drill No. 2 is used, 6½ inches. The weight of drill press is 7½ pounds. Height over all from table, 15½ inches. It is packed in a telescope paper box. It is sold with frame only or complete with drills Nos. 1, 2 and 5.

The drill press No. 23 is like No. 22 in construction, except that it has a permanent operating attachment with geared spindle and drill chuck holding drills from 0 to ⅜-inch. The distance from chuck to table with sliding frame at highest point is 6½ inches. The finish is japan and bright nickel. It weighs 6½ pounds.

Additional information will be furnished upon application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The plant of the F. C. Richards Hardware Co., Winsted, Conn., manufacturers of fencing, was almost entirely destroyed by fire on May 22d. Repairs have been inaugurated but it will be some time before the company will be in a position to fill orders satisfactorily.

Heating and Ventilating

TO THE AMERICAN

I should like to learn through THE AMERICAN ARTISAN what has been the experience of hot air furnace heaters, who use cast iron furnaces, with cement for cup joints. I should like to know whether any have ever used ground asbestos cement, dry and mixed with water. I am a believer in good and heavy cast iron, but the cement that is sent with furnaces is not entirely satisfactory to me. I should like to hear from some furnace dealers.

"ONE OF THE CRAFT."

THE FLORAL CITY FURNACES.

The latest catalogue of the Monroe Foundry & Furnace Co., Monroe, Mich., is a well printed booklet, entering into the construction of the Floral City furnace and the proper methods to be pursued in installing heating apparatus. These furnaces have made a record during the past few years, of which the manufacturers have every reason to be proud. They believe that they will continue to be successful in all communities where quality is considered rather than price.

The grates used in the construction of their hard-

Floral City Capitol.

coal furnace are the Smythe duplex triangular revolving pattern, worked in pairs by the use of a crank placed on the two center bars. The fire pot and body are heavy and deeply corrugated. The radiators are single piece castings, practically indestructible and absolutely gas proof. All the joints above the ash pit are cup joints, said to be the only kind which are proof against expansion and contraction. The parts are so thoroughly fitted together as to preclude the possibility of the escape of gas or dust.

The combination heating which has become so popular within the last few years is provided for by this enterprising concern. A combination boiler is formed by making the upper section of the fire pot hollow, thus forming the lower water ring, and connecting this with a hot water dome placed in the combustion chamber over the fire.

The accompanying illustration shows the Floral City Capitol furnace, portable form, for hard coal, soft coal or wood. It is designed to meet the demand for the so-called horse-shoe radiator. The dome is high enough to give an extra large combustion chamber and at the same time make a furnace low in height, adaptable to low basements. Ample air space is left between the dome and the inner circle of the outer radiator.

The furnace itself is said to be of ample dimensions. No light or flimsy material is used. All of the castings are extra heavy. Where the products of combustion pass from the body into the radiator, the heat is intense. A solid cast iron pot, instead of steel, is used for these parts. The fire dome is extra large and at the side of the throat is a pocket for the introduction of a pipe coil for heating water for domestic use.

Copies of this catalogue will be furnished to members of the trade upon application. In writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

THE UNIVERSAL SIDE WALL REGISTER.

The Schreiber & Conchar Mfg. Co., Dubuque, Ia., have recently placed upon the market a new side wall register, which they have called the Universal and which they are confident will become a great favorite. Before designing this new specialty, the manufacturers inspected the other registers on the market and discovered that most of those which are now in use have a damper device which they claim becomes so hot that the hand of the user is often seriously burned when the damper is to be turned. Furthermore, they discovered that the mechanism of some styles may be compared to a lawn mower when it comes to noise of

The Universal.

operation. Others are so designed that the dust rising when the room is swept, settles in the box, creating unsanitary conditions. These defects they assert have been eliminated in the construction of the Universal. The arrangement for fitting this register to the box enables the furnace man to do the work in less than five minutes. A full air capacity of pipe through the register is guaranteed, and the damper can be operated entirely by the foot. The closing and opening device indicates whether the damper is opened or closed. There are no ratchets or cogs extending into the room to catch ladies' or children's dresses. The border at the bottom is above the floor line, so that dust collected from sweeping is not deposited in the box.

It is sold at an exceptionally low price. Dealers are requested to write for further information and to mention THE AMERICAN ARTISAN.

Tinshop

Principles of Intersection.

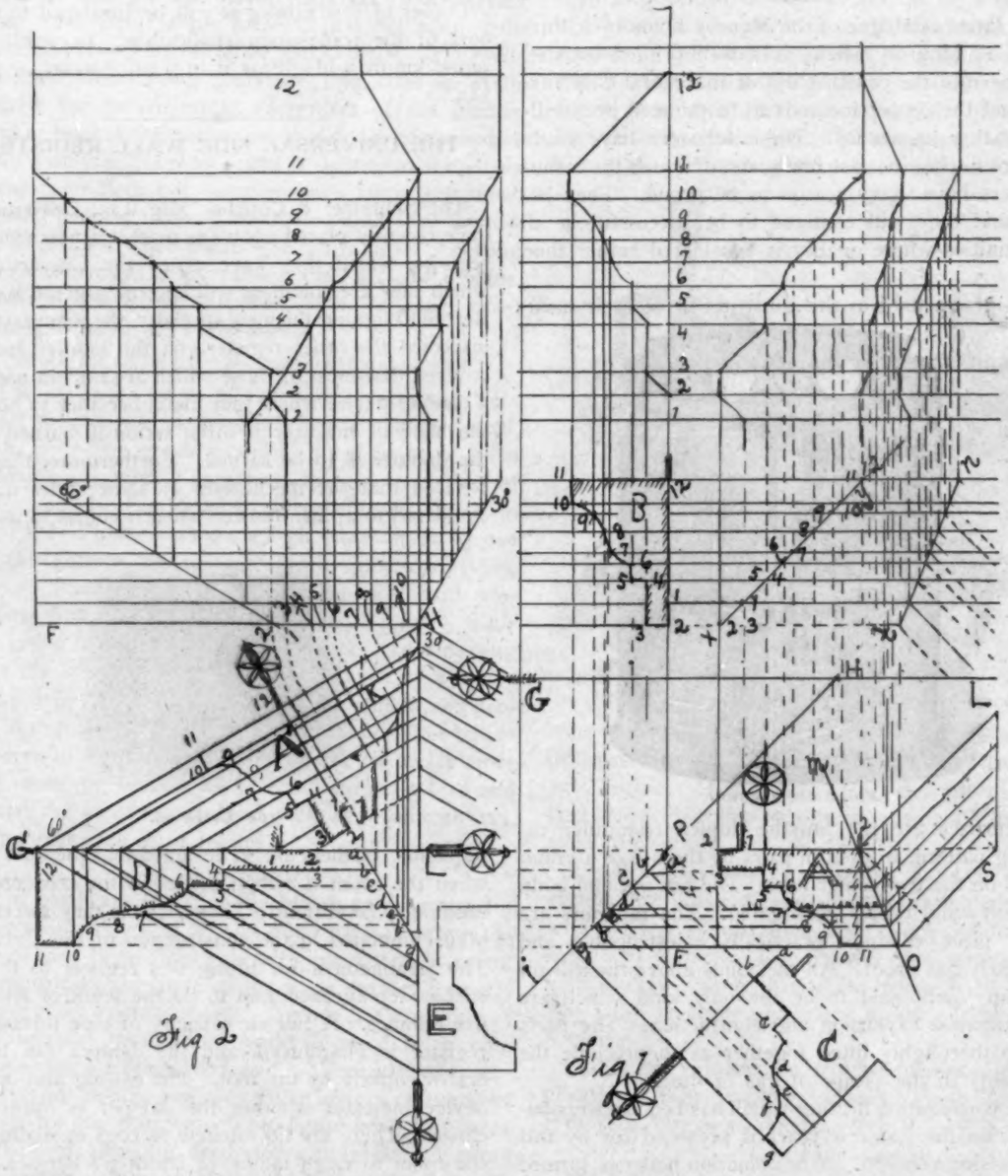
PART X.

[Copyright, 1905, by Joseph P. Coleman.]

PLATE III. FIGURE II.

INTERSECTIONS OF MOULDINGS, ORDINARY SQUARE, PANEL OCTAGON AND GABLE MITERS.

Fig. 2. In the illustration, mould A′ is placed in a gable, inclined to the horizontal plane at an angle of 30 degrees. Mould D is the intersection of mould A′ by the ground line G-L. Mould E is the intersection of Mould A′ in a gable inclined to the horizontal at an angle of 60 degrees. In this case g-H is the ground line. K is the intersection of mould A′ in this same gable by a cutting plane inclined at an angle of 30 degrees to the horizontal plane. The line 1-2-12 is the wall line of mould A′ in the gable. The circular rosette above 12 shows that the line 2-12 is the trace of the plane in which mould A′ is placed. The line 2-12 is also an axis to revolve mould A′ above the paper in its proper position. The circular rosette on ground line is an axis to revolve the vertical plane. Three patterns are shown.



SOLUTION ON DRAWING BOARD.

G-L is the ground line. A′ is in a gable inclined to the horizontal at an angle of 30 degrees. Pass planes through mould A′, cutting the surface in points 1-2-3-4-5-6-7-8-9-10-11-12. The lines drawn through the mould A′ are the vertical traces of the auxiliary planes.

Those traces intersect the ground line in points, 1-12-12 are numbered. Place the tee-square at the end of drawing board, draw lines through the points on the ground line. On those lines establish the projection of A′, giving mould D. The line 11-12, mould D, is equal to the line 11-12, mould A′. The line in mould D drawn through point 6 to the ground line is equal to the line in mould A′ drawn through point 6 to the wall line 1-12. The points 1-2-12, mould D, are on the ground line G-L, which corresponds to the wall line in mould A′. Draw the intersecting plane indicated by a-b-c-d-e-f-g, place the tee-square at side of drawing board, draw lines through the points on surface of mould D to intersect the intersecting plane previously drawn, place the tee-square on end of drawing board, draw lines through points a-b-c-d-e-f-g to intersect the lines drawn through mould A′ in gable. The line drawn through g intersects 10-11, mould A′, line f intersects 9, line e intersects 8, d intersects 7, C intersects 6-5, b intersects 4-3, a intersects 1-2 and 12, top surface of mould A′, 12 is hidden by the projection of mould A′ above paper. Lines traced through the points give mould K.

Note.—The line connecting 11-10 is perpendicular to ground line G-L. Lines drawn through points 9-8-7-6 give the curved part mould K. Lines through 6-5 and 4-3 are perpendicular to ground line G-L. Points 4-5, mould A′, are square bends, while in mould K points 4 and 5 are obtuse angles; point 3 is also an obtuse angle; point 2 is an acute angle; the line drawn through 2-1 is parallel to 3-4; the point 12, mould K, is projected on line 11-12, top surface, Mould A′, as shown by the dotted line through 1-2. A right section line through a moulding develops in a straight line. Any line through A′ parallel to wall line 2-12 is right. Section cut. Place the tee-square on side of drawing board, below ground line G-L; place the 60 degrees triangle against edge of tee-square; draw a line through point 2, mould K, parallel to wall line of mould A′, cutting the line 11-12, mould A′. Move the triangle and draw lines through all the points in mould K in a similar manner, cutting line 11-12, mould A. Revolve all the points on line 11-12 from H as a center to line H-F. Number the revolved position of points as shown. Move the tee-square to H-F and a short space below the line, place the 30 degrees triangle against edge of tee-square, draw a line 2-60 degrees as shown, place the 60 degrees triangle against edge of tee-square, draw line H 30 degrees as shown. Three patterns are to be obtained, one is the intersection of mould A′ with the ground line G-L, which is 60 degrees cut, which is shown in revolved position, indicated by 2-60 degrees. Another miter is a 30-degree miter cut, which is also shown in revolved position indicated by line H, 30 degrees. The third pattern is the distance of each line on surface of mould A′, from a right section line to the points on surface of mould K, those points being revolved and numbered on line H-F, each distance is established as shown by 1-2-3-4-5, 6-7-8-9-10, H representing 11 and 12.

Through the point 1, line H-F, draw an indefinite line perpendicular to H-F; on this line space off the distance 2-12, mould A′; draw a line through the point parallel to H-F. The height of mould A′ is now established. It is now necessary to establish the height of each line passing through A′ in the gable. Commencing with 2-A′, space distance 2-1 on the development line, previously drawn through point 1, perpendicular to H-F; space the distances 2-4-6-7-8-9-10 on the development line to correspond with mould A′, measuring from line H-F. On the development line space the distance between the points on surface mould A′; mark the points. Place the tee-square on side of drawing board; draw lines through the points on the development line, numbered 1-2-3-4-5-6-7-8-9-10-11-12; draw the lines through the points representing height of mould A′ in revolved position above the line H-F, cutting the 60-degree and 30-degree triangle lines. Place the tee-square on end of drawing board; draw lines through the 60-degree cutting plane, as shown, cutting the pattern lines in the same numbered points. Lines traced through the points give the pattern for the 60-degree intersection of mould A′ with the ground line G-L. Draw lines through the 30-degree cutting plane intersecting the pattern lines, in the same numbered points. Lines traced through the points give the pattern for the 30-degree intersection at top of gable. Draw lines through the points 1-2-3-4-5-6-7-8-9-10-H, numbered on the line H-F, to intersect the pattern lines in the same numbered lines. Trace lines through the points establishing the pattern for the intersection of mould A′ by cutting plane a-b-c-d-e-f-g.

Remarks.—The top lines of mould A, 11-12, and the base line g-H, 30 degrees' elevation, the short lines at top of gable showing the intersection of two mouldings placed in this position the 30-degree miter cut applies to top gable, the 60-degree miter cut to base of gable. The intersecting plane a-b-c-d-e-f-g would represent a plane surface, as a brick wall built up, through mould A′, or mould A′ abutting a brick wall, inclined to face of gable. The cutting plane would be read inclined to the vertical plane at an angle of 60 degrees. In this case G-L is the ground line. Form a piece of moulding, girth of mould D, cut the end square. It will join mould A′ and form an angle of 120 degrees if joined to the 60-degree miter cut mould A′. Consider mould A′ in a gable, 60-degree elevation, then the 60-degree miter cut is the top of gable, 30-degree miter cut base of gable. On one side the base of the mould is cut by a plane inclined to the horizontal at an angle of 30 degrees. In practical work the base of moulding rests on an inclined surface. Mould E is a section cut from mould A′ by the new ground line g-H, 30 degrees, form a piece of mould, to the girth mould E, cut square at end. It will join the 30-degree miter cut and form an angle 150 degrees, as shown.

CASUS BELLI.

The J. E. Whitacre Mfg. Co. of Rockford, Ill., have been quite successful in marketing the one-piece miter for which they are famous. Although this miter is covered very fully by broad patent rights, a certain Milwaukee concern, manufacturing tinners' materials and appliances, trusting to reap undue rewards for the originality and energy of others, have placed upon the

market a miter almost exactly similar, though not possessing the same desirable attributes, which they offer in competition with the Whitacre invention.

As soon as these facts were made known to the Whitacre Mfg. Co., the matter was placed in the hands of attorneys. On June 10th the firm was supplied with enough evidence to warrant civil action against the Milwaukee concern, and the jobbers who have handled the infringing miter. The defendants have been offered only one alternative—either a satisfactory settlement within ten days or civil suit in the United States courts.

It is said, however, that the Whitacre patents are so very broad and the opportunities for imitation so very small that a settlement will be made with little effort.

NOTES AND QUERIES.

FENCE GATES.

From H. M. Hamblin, Walker, Ia.

What firms manufacture fence gates?

Ans.—Adam's Steel & Wire Works, Joliet, Ill.; American Wire Fence Co., 189 La Salle street, Chicago, Ill.; Clinton Wire Cloth Co., Clinton, Mass.; Cyclone Woven Wire Fence Co., Waukegan, Ill.; De Kalb Fence Co., De Kalb, Ill.; Denning Fence Works, Cedar Rapids, Ia., and Glen Mfg. Co., Ellwood City, Pa.

STAR VENTILATOR.

From C. G. Ballhorn, Welcome, Wis.

Who makes the Star ventilator?

Ans.—The Merchant & Evans Co., Philadelphia and Chicago.

COPPER BOILERS.

From Wm. G. Meiner & Son, Lorain, Ohio.

Who manufacture wash boilers?

Ans.—P. Moshiek, 421 S. Halsted street, Chicago; Stuber & Kuck, Peoria, Ill.; Steiner, Heinkel & Co., 2605 N. 14th street., St. Louis.

STOVE PIPE THIMBLES.

From the American Co., Rockford, Ill.

Who make stove pipe thimbles?

Ans.—Stuber & Kuck, Peoria, Ill.; Logan Mfg. Co., Ottumwa, Ia., and J. K. Shick, Fairbury, Ill.

O. K. LAWN MOWER.

From North Freedom Hardware Co., North Freedom, Wis.

Who makes the O. K. lawn mower?

Ans.—Chadburn & Caldwell Mfg. Co., Newburg, N. Y.

GASOLENE HEATER.

From "Subscriber," S. E. Iowa.

Where can I buy a gasolene heater to heat a thirty-gallon range boiler in summer with gasolene, and in winter with furnace?

Ans.—Schneider & Trenkamp Co., Cleveland, O.; G. M. Clark & Co., 72 Lake St., Chicago.

SPRAYERS.

From the Brown-Hurley Hardware Co., Des Moines, Ia.

Kindly give us the names of spray pump manufacturers.

Ans.—Bastian Brass Works, 78 Illinois St., Chicago, Ill.; Berger Mfg. Co., Canton, Ohio; Wm. Brummeler & Sons, Grand Rapids, Mich.; Deming Co., Salem, Ohio; Hess-Snyder Co., Massillon, Ohio; Lowell Specialty Co., Lowell, Mich.; Rippley Hardware Co., Grafton, Ill.; D. E. Smith & Co., Utica, N. Y.; Wadsworth Sprayer Co., Wadsworth, Ohio.

LEFT HAND RESERVOIR.

From L. K. Wynn, Sterling, Ill.

Where can I buy a cast range with left hand reservoir and right hand fire box, with broiler feed for soft coal.

Ans.—Thomas, Roberts, Stevenson Co., Philadelphia; Gold Coin Stove Co., Troy, N. Y.; Chicago Stove & Range Co., Armour av. and 26th st., Chicago; John Kontny, 65-67 N. Desplaines St., Chicago.; W. D. Sager, 38 Michigan St., Chicago.

IRON WEATHER STRIPS.

From Bradberry Bros., Hurley, S. D.

Where can we obtain iron weather strips?

Ans.—Hibbard, Spencer, Bartlett & Co., Chicago; D. W. Bosley Co., 303 Fulton St., Chicago.

CORK FLOATS.

From Luthe Hardware Co., Des Moines, Ia.

Where can we buy plasterers' cork floats?

Ans.—Chicago Corks Works Co., 101 Plymouth court, Chicago, and the Armstrong Cork Co., 20 Market St., Chicago.

BRASS STRAINER CLOTH.

From Wendt & Teichler, Dundee, Ill.

Where can we buy brass strainer cloth?

Ans.—Clinton Wire Cloth Co., 235 E. Lake St., Chicago, and Clinton, Mass.; Michigan Wire Cloth Co., Detroit, Mich.; New Jersey Wire Cloth Co., Trenton, N. J.

FOSS LENGTHENING ATTACHMENT.

From G. H. Bower, 168 Smith Ave., Detroit.

Who makes the Foss lengthening attachment for bits?

Ans.—Ben. F. Foss, Fairfield, Me.

ITEMS.

The Clayton & Lambert Mfg. Co., Detroit, Mich., manufacture a tinner's furnace which is said to be so well constructed that its entire cost is often saved on the first job.

The Harrington & King Perforating Co., 212 N. Union St., Chicago, manufacture perforated metal of all description and for all purposes. Their stock is very extensive and a wide choice is possible for every buyer.

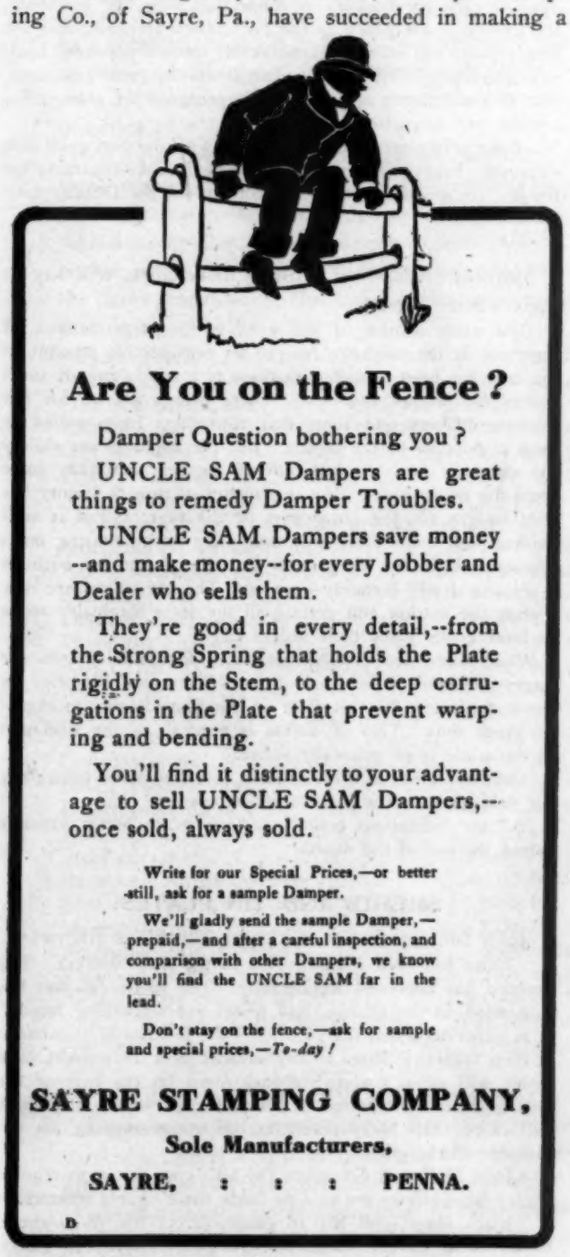
We are in receipt of the June number of the Cortright Metal Shingle Advocate published by the Cortright Metal Roofing Co., Philadelphia and Chicago. This last number contains interesting half-tone engravings and editorial talks on the advantages of tin for roofing, how it should be applied, and little helps for the tinners.

J. M. Robinson & Co., of Cincinnati, O., are erecting two additional buildings to take care of the great demand for their popular make of tinners' tools. One of the buildings will be 60 by 200 feet in dimension and the other will measure 45 by 60 feet, two stories in height. An immense traveling crane with 200 feet travel will be used in transferring the products to the different departments of their establishment. These additions will be ready for use Sept. 15th and will be located at the corner of Springport Ave. and Sassafras St.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

There is but very little to say in favor or against a damper as compared with the good qualities which one may sound in favor of other articles. In spite of the un-interesting subject, however, the Sayre Stamping Co., of Sayre, Pa., have succeeded in making a

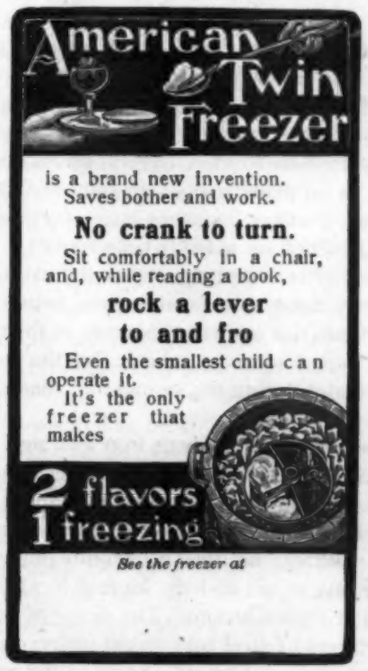


most readable and striking announcement as shown in the accompanying illustration. This is a circular which they are sending to their friends in the trade.

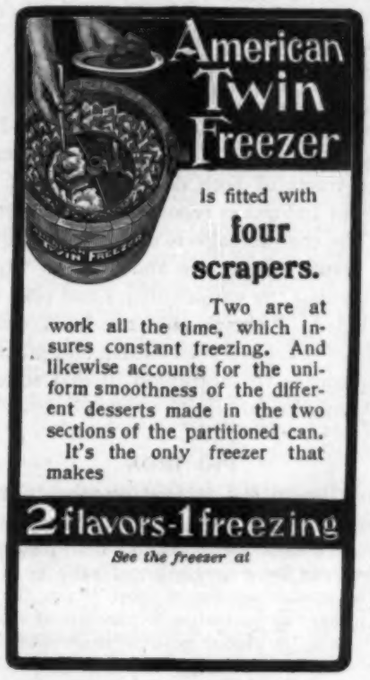
The effectiveness of this ad is brought about by the attractive display, and by the live, jolting short sentences. The cut adds greatly and is of sufficient originality to attract the attention of the reader immediately. It is to the reading matter in particular, however, that attention should be paid. The writer appreciates the value of a short sentence and makes good use of it. A long succession of points, without any connecting link, serves to increase the number as viewed from the reader's mind. The facts are set down and hammered in and there is no attempt to beautify or use stilted expressions. It is an American ad for the American people.

* * *

North Bros. Mfg. Co., Philadelphia, will be pleased to send to any of their agents without cost, charges



prepaid, electrotyped advertisements describing their American twin freezer. Two of these plates are shown in the accompanying cuts. The advertisements are



well gotten up and strongly worded. There is no question but what even a limited use of these electrotypes will bring handsome returns to the retailer.

Trade Report.

CHICAGO IRON MARKET.

There is little of note to report concerning the Chicago iron market during the week under review. Very few orders were received and such as did come in, were not of the nature to indicate whether the tendency of prices is up or down. It is true, however, that the market is extremely weak and the prices are ragged. The price of $12.00, Birmingham, for No. 2 foundry has been, and is being, made, while for local No. 2 iron $16.50 is quoted. Southern furnaces seem especially anxious to meet buyers' prices and concessions are being made freely. In spite of this break in the ranks of sellers, inquiries have increased though few new orders have actually been booked. The Pullman company is expected to enter the market for approximately 2,000 tons mostly of the foundry variety. Jobbing foundries report an increase in their business, and their report seems to indicate that the melt of iron will be greater during the second half than during the first half of the year.

New business in bars both iron and steel is of like proportions. It is said that the Western Steel Car & Foundry Co. is about to place an order for an immense quantity of bar iron but the order has not as yet been received. Prices on this commodity have stiffened since the last report and the leading local dealers are now firm at 1.55c Chicago. The desire of some of the manufacturers of steel bars to get orders has resulted in some confusion of prices. Some of the orders were placed at figures considerably below official quotations. It is said that The Interstate Iron & Steel Co. has made a conversion arrangement with the International Harvester Co., covering several thousand tons of blooms and billets which are to be furnished by it to the former company and rolled by them into bars and shapes.

A gigantic combination composed of the Bethlehem Steel Co., and other Eastern steel properties controlling large tracts of both developed and undeveloped coal lands in Indiana is reported to be almost consummated. The coal acreage is said to be about 200,000, the steel plants number ten and over seventy miles of railroad tapping the various mines and coke ovens are to be included. Pennsylvania iron fields, containing a low grade of ore, have been leased, and practically the entire deposits in the northwest of that state are said to have been secured.

PIG IRON.

Rogers, Brown & Co., iron merchants, will say in their weekly report:

During the week passed trading in all districts has been slight. Inquiries have over-balanced sales by a large majority. The greater number of those feeling the market do not seem to have an inclination to purchase at this time, only desiring to keep in closest possible touch with its changes. They are steadfastly refusing to buy iron now, but expect to have to do so in the course of a month or six weeks. Reports of the blowing out of furnaces continue, and the reduced production for June will be more marked than at any time this year. In spite of the fact that there are some people talking "blue days and trouble" for the balance of the year, present conditions in all lines, and the judgment of those best informed, do not bear them out. Unquestionably some of the elements having the largest influence on a satisfactory and busy six months were in evidence last week. The smoothing over of recent difficulties in connection with life insurance, the overtures for peace in the far eastern struggle, and the crop reports will all tend unmistakably toward improved business conditions. The last element is one of great assurance, and as the summer approaches the prospects of a bountiful harvest are increasing.

Coke prices are somewhat easier, with demand good and shipments heavy. The placing of some furnace contracts for the last six months has had its influence on the foundry coke trade.

Matthew Addy & Co., iron merchants, will say in their weekly report:

The main feature of the week is the large number of inquiries in the market. As yet no considerable amount of pig iron has been sold though there is a steady run of small orders for prompt shipment. These orders are all for immediate delivery and show that consumers have waited as long as possible before buying. But the inquiries are mainly for shipment over the last half of the year and they come from the heavy users. Not one melter of iron of twenty has iron bought for the latter part of the year, and it is self-evident that soon there will necesarily be purchasing on a wholesale scale for the general and special foundry business is good and will certainly keep up. The big buyers are now feeling the market and getting all the facts obtainable so as to intelligently place their orders.

While there are excellent inquiries for foundry iron the largest demand is for basic irons. There are inquiries on hand at present for this class of iron considerably in excess of 30,000 tons. This of course is natural, as the steel end of the trade is so unusually active.

Coke continues in brisk demand with fine sales, principally for delivery over the balance of the year.

All the indications point to a very much better business before the end of the month.

SHEETS AND TIN PLATES.

John McVoy & Co., Chicago, report as follows:

There has been a sharp turn in the sheet market. The demand has improved wonderfully. The spelter market has responded to the change, and prices are advancing rapidly. It is understood that the steel mills are practically unanimous in their refusal to listen to any advance over the present scale —this will mean a complete back-down on the part of the Amalgamated Association, or else there will be trouble, which will more than likely result in the non-unionizing the remainder of the mills.

John McVoy & Co. quote the following prices, to regular trade; large buyers are able to shade these figures somewhat:

Black sheet steel No. 16 gauge, $2.55; No. 18-20 gauge, $2.60; 22-24 gauge, $2.65; No. 26 gauge, $2.70; 27 gauge, $2.75; 28 gauge, $2.85; 29 gauge, $3.05.

Wood's smooth—20 gauge, $2.90; 22-24 gauge, $2.95; 26 gauge, $3.00; 27 gauge, $3.05; 28 gauge, $3.15.

Polished sheet steel—24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14-16 gauge, $3.00; 18-20 gauge, $3.10; 22-24 gauge, $3.20; 26 gauge, $3.45; 27 gauge, $3.60; 28 gauge, $3.82½; 29 gauge, $4.30; 30 gauge, $4.75; 36 inches wide on No. 20 and lighter, 20c per 100 lbs. advance. Sheets other than 8-ft. lengths take a slight advance over above figures. On 48-inch wide material, either 96 or

120 long, 16 gauge, $3.90; No. 18 gauge, $4.20; 20 gauge, $4.85.

Corrugated, 2½-inch ptd. No. 28 gauge, $2.15 a square. Galvanized, $3.25 per square.

Sheet copper 19c base.

Solder, warranted, 50-50 at 19½c per lb.

OLD MATERIALS.

The market seems to be slightly rehabilitated, though no decisive move has occurred to warrant a statement regarding its future course. Dealers hold the situation fairly well and it is evident that their forces are strongly organized. Whether there will be a break in the ranks of the many consumers who are at present holding out for lower prices remains to be seen. There is at present no great tendency in that direction.

No extensive lists were offered for sale during the week under review. Very little trading was done to give a line on quotations. Such as did occur, however, was done at about the quotations given below. The higher prices are those at which dealers are selling to the large consumers; the lower those at which they are buying.

Old steel rails (4 feet and over)	$14.50 to 15.00
Old steel rails (less than 4 feet)	13.50 to 14.00
Old iron rails	19.00 to 19.50
Relaying rails, subject to inspection	22.00 to 22.50
Old wheels	14.50 to 15.00
Heavy melting steel	12.00 to 12.50
Mixed country steel	9.00 to 9.50

The following quotations are for net tons:

No. 1 R. R. wrought	$14.00 to 14.50
No. 2 R. R. wrought	13.00 to 13.50
Shafting	15.00 to 15.50
Dealers' forge, No. 1	11.00 to 11.50
Wrought pipe and flues	9.50 to 10.00
No. 1 cast, 150 lb. and less	13.00 to 13.50
No. 1 mill	9.00 to 9.50
No. 1 Busheling	9.50 to 10.00
No. 2 Busheling	8.50 to 9.00
Country sheet	7.50 to 8.00
No. 1 boilers, cut	9.00 to 9.50
Boiler punchings	12.50 to 13.00
Iron car axles	20.50 to 21.00
Steel car axles	15.00 to 16.00
Iron axle turnings	10.00 to 10.50
Cast borings	7.00 to 7.50
Mixed borings, etc	7.00 to 7.50
Machine shop turnings	9.50 to 10.00
Railroad malleable	12.50 to 13.00
Agricultural malleable	11.50 to 12.00
Stove plate and light cast scrap	9.50 to 10.00
Old iron splice bars	17.00 to 17.50

CHICAGO HARDWARE SCRAPS.

The movement of money is reported to be greatly restricted. This is said to be especially true in the South where funds will soon be necessary to move cotton, of which there is a great abundance. This call is somewhat earlier than usual, and what is more it is larger. The South apparently is in doubt about the accessibility of money later on in the year and is therefore making sure of its supply at the present time. Reports indicate that though people are not hoarding money to any great extent a vast amount is locked up in loans.

Officials of the western railroads express very hopeful sentiments concerning the outlook of crops and business conditions in the western states. They believe that an abundant crop will necessitate a larger number of cars than have been used during the recent years. This feeling is certainly reflected in the buying movement in which retailers are indulging at the present time. Orders are keeping up with great regularity in spite of the fact that the latter part of June and all of July are normally dead months.

The only place where there has been any noticeable falling off in receipts and shipments of general merchandise is at Chicago. Merchants here are not doing their normal amount of business owing to the strike. It is the general impression, spread by the newspapers and by the misleading advertisements of some wholesalers, whose terms are not affected, that the teaming interests of the city are indissolubly tied up and that it is impossible for country dealers to get their shipments promptly and in good condition. These statements are, of course, untrue, and one can say without the slightest exaggeration that so far as shipments and receipts are concerned, the wholesalers of Chicago are just as well situated now as before the strike was started. Where Chicago manufacturers and wholesalers have lost, other cities have gained.

Strictly summer goods, as ice cream freezers, refrigerators, awnings, lawn mowers, and things of this nature, show an improvement from week to week. The demand has extended farther into the summer this year than last year or the two preceding years.

The demand for galvanized eaves trough and conductor pipe has shown an improvement since the recent advance and shows that this was entirely justified by conditions. Galvanized sheets are somewhat demoralized owing to the report of over stocks in the hands of both jobbers and retailers. Spelter is rapidly declining in value.

As might be expected, the demand for wire and cut nails is light. June is one of the poorest months of the year for the selling of these staples. Price concessions are being made by some of the jobbers in order to reduce their enormous stocks.

On June 12th the Interstate Window Glass Manufacturers' Association, composed of the independent winlow glass makers of the country, was organized at Columbus, O. The chief purpose of this organization is to guard against the inroads which the machine is making on the business. It is claimed that the hand window glass makers cannot compete with the American company, on account of the great economy made possible by the use of these machines, and the consequent reduction in the cost of production. It is probable that action will be taken to reduce the wages of the employes 20 to 25 per cent. A committee was appointed at the meeting to accomplish this end.

OLD METALS.

The American Metal Market quotes as follows: Heavy cut copper, $13.00; copper wire, $12.50; light copper, $11.00 to $11.25; No. 1 composition, $11.00 to $11.25; heavy brass, $8.00 to $8.25; light brass, $6.75 to $7.00; No. 1 yellow brass turnings, $7.50; No. 1 composition turnings, $9.00 to $9.50; heavy lead, $4.10 to $4.15; tea lead, $3.75 to $3.85; joints, $7.00; zinc scrap, $4.00 to $4.12½; No. 1 pewter, $20.00 to $21.00; block tin pipe, $27.50 to $28.50.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$17 50@$18 00
North'n Coke Fdy., No. 1	17 75
North'n Coke Fdy., No. 2	17 25
North'n Coke Fdy., No. 3	16 75
Northern Scotch, No. 1	19 00
Ohio Strong Softeners, No. 1	18 30
Ohio Strong Softeners, No. 2	17 80
Southern Silvery, 4 to 6 per cent Silicon	17 65@ 18 65
Southern Coke, No. 1	17 15@ 17 40
Southern Coke, No. 2	16 65@ 16 90
Southern Coke, No. 3	16 15@ 16 40
Southern Coke, No. 4	15 90@ 16 15
Southern Coke, No. 1, Soft	17 15@ 17 40
Southern Coke, No. 2, Soft	16 65@ 16 90
Southern Gray Forge	15 65@ 15 90
Southern Mottled and White	15 40@ 15 65
Malleable Bessemer	17 25
Standard Bessemer	17 80@ 18 30
Jackson County & Kentucky Silvery, 6 per cent Silicon	19 80@ 20 30
Jackson County & Kentucky Silvery, 7 per cent Silicon	20 30@ 20 80
Jackson Co. & Ky. Silvery 8% Silicon	20 80@ 21 30
Jackson Co. & Ky. Silvery 10% Silicon	21 80@ 22 30
Alabama Basic	16 65
Virginia Basic	17 65

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$2 55
No. 18-20 per 100 lbs.	2 60
No. 22-24 per 100 lbs.	2 65
No. 25-26 per 100 lbs.	2 70
No. 27 per 100 lbs.	2 75
No. 28 per 100 lbs.	2 85
No. 29 per 100 lbs.	3 05

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4 60
No. 26 per 100 lbs.	4 70
No. 27 per 100 lbs.	4 80
No. 28 per 100 lbs.	4 90

SMOOTH STEEL.

Wood's Smooth, No. 20	$2 90
" " No. 22-24	2 95
" " No. 25-26	3 00
" " No. 27	3 05
" " No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 29, per 100 lbs	5 00
Nos. 22 & 24 x 36 in., per 100 lbs	3 70
No. 26 x 36 in., per 100 lbs	3 90
No. 27 x 36 in., per 100 lbs	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½	per lb. 20½c
Commercial ½ & ½	per lb. 19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks	case, per cwt. $7 90
360 lb. Casks	per cwt. 7 95
Sheets	per cwt. 7 70

COPPER.

Copper ..... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c
Sheet.	
Full coils per 100 lbs.	$7 00
Cut coils per 100 lbs.	7 25

HARDWARE.

ADZES.

Carpenters'.	
Ajax	35&15%
Blood's	40&2½%
Coopers'.	
Barton's	20%
White's	15%
Ship.	
Ajax	33⅓%
Blood's	37½%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Eley's	52c
Cartridges.	
Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol and Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs. 22 cal	$1 24
Peters Blank Ctgs. 32 cal., C. F.	4 60
Peters BB Caps, Round ball	1 50
Peters BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. BB Caps, Con. ball $1 85 net	
U. M. C. Rim Fire Shot Ctgs.	50&15&3%
U. M. C. Cent. Fire Shot Ctgs.	25&15&3%
Primers.	
Berdan Primers	$1 00
Peters Primers	20%
Winchester Primers	20%
Shells.	
Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Ideal Empty	25&7%
Peters Target and High Gun Smokeless	40&8%
Peters Premier and Ideal Smokeless	40, 10, & 10%
Peters Loaded Shells, League	40&2%
Peters Referee Semi-Smokeless	40&2½%
Winchester Blue Rivals	33⅓ &
Winchester Yellow Rivals	11%
Winchester Repeater	40&5%
Winchester Leader	40-10&10%
U. M. C. Loaded Shells, Black Powder	33⅓ &
Winchester Loaded Shells, Black Powder	11%
Gun Wads—per 1,000.	
Peters Gun Wads	20%
U. M. C. Gun Wads	18%
Powder.	Each
King's Smokeless, kegs	$11 30
" " ½ kegs	5 80
" " ¼ kegs	2 97
" " 1-lb. cans	51
" " 1-lb. " rifle	70
Dupont's " 50-lb. drum	$2 45
" " 25-lb. kegs	11 25
" " 12½-lb. kegs	5 80
" " 6½-lb. kegs	2 97
" " 1-lb. cans	51
Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 90
Buck Shot, 25-lb. bags, per bag	1 90
Chilled Shot, 25-lb. bags, "	1 90

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs.	9½c per lb
Trenton, 81 to 150 lbs.	9½c per lb

ASBESTOS.

Board and Paper	33⅓%

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nat.	60&10&5%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	33 50
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40&5%
Iwan's Vaughan pattern, 4 to 9-in., per doz.	6 00
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.	
Handled per doz.	$0 28
Shouldered, assorted, 1 to 4, per gro.	95
Patent asst'd, 1 to 4 "	90
Harness.	
Common "	1 10
Patent "	90
Peg.	
Shouldered "	95
Patent "	40
Scratch.	
No. 2, handled "	4 80
No. 1, socket handled per doz.	1 15
No. 20 Hurwood "	2 00
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Camp Fire, 3 lb per doz.	$6 25
" " 4-lb., freighters', per doz.	7 85
Cast Steel, good grade, "	6 25
Pioneer "	6 75
Broad.	
Peerless	40-10&5%
Red Warrior per doz.	$22 50
Firemen's (handled) "	13 00
Single Bitted (handled).	
Gladstone, 3 to 4 lbs., per doz.	$10 75
Hunt's " " "	9 00
Lippincott's " " "	9 00
Mann's " " "	9 00
Pioneer " " "	9 75
Valley Forge " " "	9 00
Maricopa " " "	7 50
Single Bitted (without handles).	
Gladstone, per doz. 3 to 4 lbs.	$8 50
Hunt's " "	6 75
Lippincott's " "	6 75
Mann's " "	6 75
Pioneer " "	7 25
Valley Forge " "	6 75
Maricopa " "	6 00
Double Bitted (without handles).	
Lippincott's, 3 to 4 lbs. per doz.	$9 25
Mann's " "	9 25
Pioneer " "	9 25
Valley Forge " "	9 25

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BARS, CROW.

Pinch or Wedge Point cwt. $2 95

BASKETS.

Clothes.			
Small Willow per doz.	$5 75		
Medium " "	6 50		
Large " "	7 25		
Galvanized Iron.	½ bu.	1 bu.	1½ bu
Per doz.	$4 00	5 50	7 00

BEAMS, SCALE.

P. S. & W. Co. 40%

BEATERS.

Carpet.	
Rattan per doz.	$2 40
Raymond's Steel Wire "	80
Woven Wire, No. 4 "	1 10
Egg.	Per doz.
D. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths'	70%
Hand.	
8 inch per doz.	$6 85
10 inch "	8 40
Molders'.	
12 inch "	13 00

BELLS.

Call.	
2½ in. nickeled bell per doz.	$1 85
2½ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell per doz.	17 00
4½ in. nickeled brass bell and base per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic per doz.	$0 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	70, 10&5%
Farm, lbs. 40 50 75	100
Each $1.10 1.30 1.85	2.65

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	50&5%
New Jenning's	50, 10&10%
Russell Jenning's	35&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" " Large " $36.00	30%
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger pattern Car	40&5%
Center	40&10%
Countersink.	
Wheeler's per doz.	$1 30
American Snail head. "	70
" Rose " "	80
" Flat "	70
Buck Bros.' Flat "	2 65
German "	70
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	50&5@50&10%
German Pattern per doz.	$0 48
Gouge "	80
Spoon "	80
Countersink "	1 30
Reamer.	
Buck Bros.' ½ Round "	2 75
" " Square "	2 50
Standard ½ Round "	75
" Square "	75
German Octagon "	75
Screw Driver.	
Round Shank "	50

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ¾ & 1½ in.....60&5%
Clock Spring.....60&5%
Star 15%
Hack.
Disston's .....25&5%
Griffin's.....35&5%
Star 15%
Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
No. 11 ..... 6 40
W. M. & Co.'s No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel .....40&10%
Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Stove.....40%
Wash.
Globe .....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
8½ oz. iron.....per doz. $0 65
1½ lb. " ..... " 1 60
2¾ lb. " ..... " 1 80
13 oz. lead ..... " 3 00
6½ oz. brass..... " 3 30

BOLTS.

Carriage, Machine, Etc.
Carriage ⅜x6 and sizes smaller and shorter.....75%
Carriage, sizes larger and longer than ⅜x6 .....70&5%
Machine, ⅜x4 and sizes smaller and shorter.....70&5%
Machine, sizes larger and longer than ⅜x4.....70&2½%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire .....75&10%
Wagon Box Strap .....70&10%
Mortise Door.
Gem.....50&10%
Ives'.....50&10%
Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%
Flush.
Wrought, B K .....40&5%
Spring.
Wrought .....75&10%
" Brass .....75&10%
Square.
Cast.....40%
Wrought .....60-10&10%
Tire.....72&4%

BORERS.

Angular.
Miller's Falls..... per doz. $13 75
Bung.
Common ring with handle.
Inches..... 1½ 1¾ 2
Per doz.....$6.25 7.25 8.50
Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2½%

BOXES.

Mail, No..... 5 10 20
Per doz..... $3.50 10.50 13.00
Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 30

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's.....60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces.....25%
P.,S.&W.Co.,Peck'sPat.....60&5%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50
Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2½%
Wire .....80, 10&5%

BROILERS.

Wire.....70&10%
Crown,Self-Basting, No. 80.doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75
Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURS, RIVETING.

Copper Burs only.....35-10&5%
Tinners' Iron Burs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 822 and 823.....85-10&7½%
Wrought Steel, Japanned.
Nos. 731 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing.....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75
Toe.
Shoenberger.....per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40
Milk.
Elgin Pattern.
Nos..... 808 810
Gals..... 8 10
Per doz..... $22.80 $24.60
New Elgin Pattern.
Eureka Pump, 5 gal.....$9 25
Wood Jacket.....50, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $15.75 $18.00 $18.75
Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $21.00 $22.20
New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $25.15 $26.95
Oil and Gasoline.
1 Gal. glass, Daisy....per doz.$2 10
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.60 $2.60 $3.35
Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33⅓%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list..65&10%
Martin's.....50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel.25&5%
" Rubber Weeel.....15%

CATCHERS, GRASS.

Bieder's No. 1.....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack .....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85
Bright Ox Chains.
⅞ in. $7.25; ⅞ in. $5.45 per 100 lbs.
Cable Coil Chain.
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ⅞ 1 1¼
Per 100 lbs.. $4.00 $4.00 $4.10
Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil
Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%
Halter Chains.
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list .....40&5
Triumph, " 30%
Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c
Pump Chain.
Galvanized, per 100 lbs.....$4 75
Safety Chain.
Brass.....60&10%
Special Steel Loading Chain.
Inch ..... ½ 9/16 ⅝
Per 100 lbs... $16.00 $13.50 $12.50
Stretcher Chains.
7/16 in. $8.50; ⅞ in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's .....70&10%
Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1 ..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brnd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.95 3.60 4.20
Cold.
Good quality.....per lb 10@19c
Socket, Framing and Firmer.
Barton's.....20%
P. S. & W. Co.....70%
For beveled back, add per doz. .60c
Tanged, Firmer.
P. S. & W. Co.'s.....35%
With handles, add per doz.....60c
Choppers, Enterprise Meat.
No. 12.....$2 10
No. 22..... 3 40

CHUCKS, DRILL.

Standard Tool Co.'s.....40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel.....70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%
Carpenters'
Steel Bar.....25%
Carriage Makers'
P. S. & W. Co.'s.....40, 10&5%
Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c
Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAW TACK.

Cast, wood hdle..... per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .00

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%
Pot.
Wire..... per doz. $0.55
Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable ..... per lb 3½c

CLIPPERS.

Bolt .....$1.90@$4.75

CLIPS.

Axle.....65&5%
Damper.
Standard.....per doz. 65c
Troy..... " 38c
Hame..... " 20c

CLOTH.

Emery.
Ajax.....50&10%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25
Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz...$3.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $2.00 $2.35 $3.40
Japanned Tin " 2.20 2.45 4.50
Lacquered Brass " 2.55 2.90 4.00

COMBS, CURRY.

Nos ... 000 20 321 330 417 416
Per doz.$0.32 .80 .90 .95 .80 1.00
Nos 531 533 530 535 545 390
Per doz.$0.96 1.20 1.10 1.85 1.40 1.30

COMPASSES.

Carpenters'.....70%
Pencil—Faber's.....per doz. $1.00

CONDUCTOR PIPE, GALVA.

L. C. L. to dealers

Territory	Nested	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern.....	65&2½%	60&20%
S. Western...	60&20%	60&10%

Terms, 60 days; 2% cash 10 days
Factory shipmh'ts generally deliverd
See also Eave Troughs.

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 31c
1½ lb.....28c 2 lb..... " 27c
3 lb and larger..... " 25c

CORD.

Picture.
White Wire .....80-10&5%
Sash.
Baltic Braided Flax.....per lb 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 23c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $2 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 100, list, $18.00 ..... 40&10%
Nos. 2 and 4 ..... 25%
Universal... Nos. 1 2 3
Per doz $10.50 $12.50 $17.00
Smith & Hemenway Co 25%
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 25
Eagle ..... " 5 75
Eureka ..... " 6 25
Hercules ..... " 9 75
Iwan's Split Handle .. " 7 00
Iwan's Perfection ..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1⅛ in. " " " 7 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60% & 65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz .. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Ajax ..... 70&5%
Champion 45%
" Pattern ..... 60, 10&5%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co ..... 40&5%

EAVE TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 80&5%
Central ..... 75&10&10%
Southern ..... 75&12½%
S. Western ..... 75&5%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.30
Plan'd " 2.00 2.25 2.85
Corrugated Conductor.
5-inch ..... each 60c; per doz, $7.20
6 " ..... " 70c; " 8.40
75% discount to dealers on 2-inch 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.85 $0.90 $1.50
Pol'd " 1.50 1.75 2.50
Plan'd " 2.20 2.60 3.20
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. $0.50 $0.52 $0.90
Pol'd " .95 1.05 1.40
Plan'd " 1.45 1.60 2.60

EMORY CLOTH—See Cloth.

EMORY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6½c 4¾c 4¾c
Flour ..... " 5½c 3¾c 3½c

ENAMEL, IRON.

English, ½-pt. cans ..... per doz. $1 50
Nubian " " ..... " 1 80
Peerlen 1 50

EXTRACTORS, PIG.

See Forcips, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 55%
Iron ..... 65&5%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 1 40
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Black Diamond ..... 70&10%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel ..... 70&2½%
Wood, 4 tines, per doz $5.25
Coal, Coke, Cottonseed 40%
Hay.
Diamond, 2 tine ..... 50&10%
" 3 " 60%
" 4 " 40%
Golden Eagle, 3 tine 65%
" " 4 " 70%
Digging ..... 70&10%
Scoop 40%
Header.
Diamond, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Diamond, 4 tine ..... 60&10%
Golden Eagle 70%
Ore 40%
Spading.
Diamond ..... 70&10%
Golden Eagle ..... 70, 10&5%

FRAMES.

Hack Saw.
Crown ..... per doz. $6 25
Miller's Falls ..... " 10 20
Star ..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform ... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ... 20&10&2½%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%@50&10&5%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%
P. S. & W. Co.'s 20%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First three brackets ..... 90&15%
Above " " ..... 90&10%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Eagle 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 90&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. $5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing .. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top ... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie ..... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's ..... 40&10%
Engineers'.
Maydole's ..... 40&10%
Farriers'.
Maydole's ..... 35&5%
Machinists'.
Maydole's ..... 40&10%
Nail.
Ajax ..... per doz. $6 00
Calumet ..... " 3 15
Cast ..... per doz. $1 10@ $1 50
Maydole's ..... 30&5%
Vulcan ..... 35&5%
Riveting.
Maydole's ..... 35&5%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz ..... .70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 70&10%
5 lbs. and over ..... 75&5%
Masons'.
Single & Double Face ..... 70&10%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Roger's " ... " 4 25
Ives' " ... per set 1 35
Axe ..... 50&10%
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 48c
Blacksmiths' ..... per doz. 55c@80c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 45c
Hay and Manure Fork ..... 40&5%
Hoe and Rake ..... 40&5%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 40%

HANGERS.

Barn Door.
Monarch ..... 60&10%
"Never Jump" Hinge ..... 50&10%
Peerless, Loose Axle ..... 60&10%
Perfection, Roller Bearing .. 70&5%
Phoenix, Roller Bearing ..... 70&5%
Prouty, No. 315 .. per doz. prs. $6 35
Rival ..... " " 3 65
Superb ..... " " 5 50
Safety Flexible . " " 6 35
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor Pipe.
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 35
Imperial 20%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%
Wilcox Standard ..... per set $3 15

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Ajax 35%
Blood's 40%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling ..... " $0 95@1 20
Duffy's Barrel ..... per doz. $18 00
Germantown 40%
Hammond's 40%
Roger's Ideal ..... per doz. $5 25
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 75
" No. 2 ..... " 10 50

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only ... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor .. 35%
Bommer Bros. Spring Hinges .. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $0 25
Oxford 20%
Wrought Iron.
New Lists .....
Light Strap Hinges ..... 70&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 65&5%
Heavy T Hinges ..... 70-10&5%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap 80-20-10-10-10&5%
Cor. Ex. Heavy T 80-20-10-10-10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 65
14 to 20 in ..... " " 3 40
22 to 36 in ..... " " 3 15
Screw Hook and Eye.
⅝ in ..... per 100 lbs. $6 55
½ in ..... " " 7 60
⅜ in ..... " " 9 45

HOES.

Garden ..... 70&15%
Grub.
Ajax ..... 60 & 10%
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 70&15%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&5%

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
..... per doz. $7 00@$8 65
Hamilton Pattern.....per doz. 7 35
Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60 - 8.10 9.75 11.50 12 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%
Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 2 75
Clyde's..... " 2 20
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 30
Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c
Lambrequin, or Drapery, per gro. 21c
Picture .....50%@50&10%
Potato and Manure.....65&15%
Screw.
Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.
Ever Ready .....per case $1 70

HOSE, GARDEN.
3 ply ¾ in. 35 lb. pressure per ft....5½c
3 " ¾ " 50 " " " 7½c
3 " ⅞ " 70 " " " 7½c
3 " ¾ " 70 " " " 9c
4 " ⅞ " 80 " " " 9c
4 " ¾ " 80 " " " ...10½c
6 " ¾ " 125 " " " ...11½c
8 " ¾ " 150 " " " 13c
Cotton ¾ in. 75 lb. pressure per ft. 7c
" ¾ " 150 " " " 9c

HUSKER.
Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 5.00
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos.....4000 O OX
Per doz.....$1.15 2.25 1.65
Brinkerhoff's.
Per gro.....$14 50
Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75
Johnson's.
Per gro.....$7 75

IRON.
See Metals—First column.

IRONS.
Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list) 25&5%
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb. 4½c
" Geese}..... " 4½c
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.
Locomotive.....75&5%
Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co 25%

KETTLES.
Brass.....15%
Caldorn 45%
Copper.....per lb. 27c
Maslin 66⅔%
Sugar .....50&5%

KNIVES.
Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15%
Corn.
Ajax.....per doz. $2 10
Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
" Folding Handle.....25&5%
P. S. & W. Co's. new list 75-5%
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 0
Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.
Door.
Mineral .....per doz. $0 73
Porcelain ..... " 83
Jet..... " 83

LADDERS.
Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.
Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Berger.....40&10&5%

LEADERS, CATTLE.
Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.
Cut.....50&10%
Slaes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.
Valve and Plunger 50%

LIFTERS.
Stove Cover.
Japanned .....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00
Transom.
Payson's.....70&10%

LINES.
Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz.....10c 13c 17c 22c 29c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....26c 31c 36c 42c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 23c 26c 32c
Masons', in 100-ft. hanks..doz. $1 00
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 10
60-ft. Sisal ..... " 1 50
72-ft. " ..... " 2 10
50-ft. Cotton ..... " 85
50-ft. Braided Cotton. " 95

LINING, STOVE.
In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 25	$6 75
Angular.... "	3 25	4 65
Boss ..... "	4 25	5 75
Upright.... "	2 90	4 35

Leather Riveting.
Chicago, Pomeroy....per doz. $9 75
Excelsior ..... " 2 50
Handy ..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss 1 2 5
Per doz.....$55.20 62.20 68.20
Globe, No. 1 .....per doz. 53 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.
See Boxes.

MALLETS.
Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.
Door.
National Rigid.....50, 10&5%
Queen Flexible.....50%
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex.
Heavy .....per doz. 1 00

MATTOCKS.
Ajax.....60&10%
Extra 70%

MAULS.

Iron. lbs.	10	13	16	18	21
Per doz.	$2.95	3.65	4.20	4.60	5.05
Wood face, lbs.		10	11	12	
Per doz		$4.55	4.90	5.15	

Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10%

MEASURES.

	¼ pk.	1 pk.	½ bu.
Galvanized. per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.
Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.
First Quality.....25%
Second Quality.....35%

MILLS, COFFEE.
Enterprise 35%
Parker.....50%
Arcade 50%

MITRE BOXES.
See boxes.

MOPS.
Erie.....per doz. $3 15
Handled Cotton.

Pounds.....	¾	1	1¼	2
Per dozen...	$2.00	2.35	2.85	3.25

MOWERS, LAWN.
Ball-Bearing.

Inches.....	15	17	19	21
Each	$7.50	8.50	9.50	10.50

Cheap Grades.

Inches.....	12	14	16	18
Each	$2.30	2.35	2.35	2.50

Clipper .....50, 10&10%
Girard.
Inches..... 14 16
Each.....$3.25 3.50
Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

NAILS.
Cut Steel.....rates, $2 05
Horse Shoe.
Ausable .....45&5%
Capewell 5%
Perfect .....40&5%
Putnam 10-5%
Star 35%
Picture.
Brass Heads .....40&10%
Judd's.....40&10%
Brads.....80, 10&10%
Furniture .....65&10%
Wire.
Small Lots.....$2 05
Carload " 2 00
Cement Coated..... 1 80

NAIL PULLERS.
See Pullers.

NAIL SETS.
See Sets.

NETTING, POULTRY.
Galvanized Before Weaving..80&15%
" After Weaving...80&15%
Cut Pieces.....65&5%

NIPPERS.
End Cutting.
P. S. & W. Co.....60&10%
Stubb's Pattern.....60&10%
End and Diagonal Cutting.
Swedish Side.....35%
Utica Drop Forge & Tool Co...40%
Hoof.
Heller's .....40&5%
P. S. & W. Co.....40&10%
V. & B.....40-5%

NOZZLES.
Hose.
Gennine Boston.....per doz. $1 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.
Square Blank.

In.	¼	⅜	½	⅝	¾	⅞	1
lb.	9c	6c	4c	3½c	3½c	3½c	3c

Square Tapped.

In.	¼	⅜	½	⅝	¾
lb.	12c	7½c	5c	4½c	4c

For 5 lb. boxes add ½c per lb. to above prices.

OILERS.
Chase Pattern
Brass and Copper.....35%
Zinc 60%
Engineers'
Cannon.....50%
Tin.....per doz. $2.00@$3.00
Machine.
Ajax.....per doz. $0.80
Copper Plated Steel.. " 1 50
Malleable Iron.....40, 10&5%
Tin.....per doz. 55c@65c

OPENERS.
Box.

Inches.....	10	12	14
Flat ..per doz	$2.85	3.60	4.15
Round "	2.10	2.25	2.75

Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.
Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.
Standard Wrought .....70, 10&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.
Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock

Galvd. qts.	14	16	18	20
Per doz.....	$3.50	3.75	4.50	5.00

Water.

Galvanized, qts	10	12	14
Per doz	$1.75	1.95	2.25

Wood.
Cable, 2-Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.
Dripping.....60&10&5%
Fry.
Common.....60&10&5%
Acme.....66⅔&5%
Roasting.
Brownie.....each 22c@30c
L. & H..... " 45c@63c

PAPER.
Building.
Plain .....per 100 lbs. $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 45
Diamond A, Red Rosin, pr roll 60
Leader, Red Rosin..... " 45
Sand and Emery.
Ajax .....50&10%
B. & A.....50&5%
Wrapping.
Grecian Express.....per lb. 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Reading..... " 6 50
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%
P. S. & W.....40 &10&5%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern	65&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per ℔. 6¼c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c

Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Wrought Iron Gas Pipe
⅛@¼-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@¼ " galvanized " 42%
⅜@½ " " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.35	$2.50	$3.45	$4.40

Cutting.
Bernard's.....30%
Lodi.....40&10&5%
4 Tube, revolving..... " 5.25

End and Diagonal Cutting.
Swedish Side 50%
Utica Drop Forge & Tool Co....40%

Fencing.
Cronk's .....per doz..$8 80
Farmers' Choice.... " .. 8 80
Russell's..... " .. 8 80

Flat and Round Nose.
Bernard's 30%
German 50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%

Gas—In.	8	10	12
Per doz.....	$3.15	$4.10	$5.00

Tinner's.
Hollow.....
Solid.....each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " ..80
Nickel pl'td, coil hdl's.. " " ..65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLES—FISHING.

Bamboo.

Ft.	12	18
Per. 100	$2.65	$6.25

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	½	¼
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail..... 80c
Paste, 5 oz. cans....per doz. $0 80
Paste, ½ ℔. cans..... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ¾ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 85@95c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 50

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem..... " 6 75

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $2 10

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $7 50
Henry's Improved..... " 65&10%
Water's Improved..... " 70,10&5%

PULLERS.

Cork.
Daisy.....each $3 40
Phoenix..... " 1 60
Quick and Easy..... " 2 90

Nail.
Giant.....33⅓%
Giant Pattern per doz.....$6 00

Tack—Giant..... " 45

Staple.....50%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....20&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 85
Wood Wheel, 6 in.... " 1 80
Wood Wheel, 6 in., pass knot..... " 2 25
Hot House—Jap'd .....30&5%
Screw..... " .....30&5%
Side ..... " .....30&5%
Sash.
Clark's..... " 42
Common Sense, 2 in ..per doz $0 26
" Pattern, 2 in.. " 22
Empire..... " 24
Ideal..... " 22

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.60
Garden.
Steel, braced.....80&10%
Steel, bow.....70c
Malleable Iron, heavy.....70&10&5
Hay.
Wood.....$1.40@$2 00
Lawn—Wood.
Common.....per doz. 2 35
Automatic ..... " 5 75
Gibbs'..... " 3 70
Jumbo, 36 teeth..... " 6 30

RASPS—See Files.

REGISTERS.

List December 5, 1904.

Black and White Japanned. .70&10%
Nickel Plated.....75%
Electroplated, Brass, Bronze or Copper.....75%

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.20	$1.60

Rea's Impro'd Self Piercing

copper, pr d'z.	$1.25	1.65	1.75
Steel per doz..		.95	1.05
Nickel Plated		1.35	...

and Ringers—Hog.
Blair's Rings .....per doz. $0 60
Blair's Ringers..... " 85
Brown's Rings..... " 65
Brown's Ringers..... " 90
Champion Ringers... " 1 70
Hill's Ringers..... " 65
Hill's Ring, boxes..... " 45
Major Rings ..... " 80
Perfect Ringers..... " 95
Wolverine Rings..... " 1 50
Wolverine Ringers... " 70
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....66⅔@10%
Hame ..... per ℔. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per ℔. 12½c
¼, 5-16-in. Com. in coils .. " 13c
¼, 5 16 Imperial in coils . " 22c
Sewall & Day Sisal Rope.
Rates.....10½c
Sisal.
Eagle, rates.....per ℔. 8½c
Pure Manila.
Rates..... " 12½c

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%
Butchers'.
Disston's..... 35&7½%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common..... per doz. $1.35@$1.60
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35%
Disston's..... 40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....25½%
Keystone.....30%
Sterling Hack Saw Blades.....35%
Sterling Hack Saw Frames.....20%
Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
Keyhole—Disston's.....25&7½%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%
Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50
Cabinet.
Ajax.....per doz. $2 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron ....50&5%
Wood, white maple..per doz. $3 60
Hand—Wood.....20%
Hand Rail.....70&10%
Jack .....75&10&10%
Lag or Coach—all sizes, gimlet pointed .....75&10%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	19c	22c	27c	32c	25c	27c

Wood.
F. H. Bright Steel.....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H. Jap'd Steel.....82½&5%
F. H. Brass.....85&5%
R. H. Brass.....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz. $8 15
Clipper, grass ..... " 6 30

SHAVING SETS.
Smith & Hemenway.....60%

SETS.
Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Buck Bros.. " 1 20
Cup Point, knurled, pr. doz. 70c@$1.20
Rivet.
Farmers'.. .....per doz. $1 45
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch .. " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's..... " 4 80
Nashe's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 20
" X Cut..... " 2 50

SHARPENERS, SKATE.
Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.
Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.
Pruning.
Buckeye, No. 1.....per doz. $6 75
" No. 2..... " 8 40
California Pat.. 9 in.. " 4 20
" " 10 in.. " 5 00
Draw Cut, No. 3..... " 14 75
" " No. 4..... " 17 50
Henry's Pat. 0 01 14 012
Per doz.....$1.90 $2.50 $3.15 $3.30
Star.....per doz. $4.75
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union..... per doz. $6.75

SHIELDS.
Expansion Bolt Shields.....50&10%

SHOES.
Conductor.
5-inch.....each 28c; per doz. $ 3.30
6 " ..... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Ajax.....per doz. $5 25
No. 4 Golds..... " 6 25
Ames' new list.....Discount 12½%
Per Doz
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Gold Hibbard's.....per doz. $9 25
C. H. Conover's..... " 7 75
Beckwith's..... " 7 75
Hickory..... " 6 25
Greenleaf's..... " 5 75
Columbus..... " 5 00
Ames' new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Atlanta Steel.
D Handle.....per doz. $6 00
Long Handle..... " 5 00

SINKS.
Cast Iron.
Painted..... 50%
Enameled, White.....60-10&5%
Wrought Steel.
Painted, new list.....40 10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.
Double Ring, Bush.....per doz. $6 75
Patent Loop " .... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.
Hernisch's.....40&5%
National.....40&10%
P. S. & W. Co.'s.....25&5%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.
Nos..... 1 2 3 4
Per doz.... 28c 33c 35c 40c
Reliance.
Per doz.....light $1.45; heavy $2.20
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.25
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.
Steel and Iron.....75%
(Add for Bluing, $2.50 per doz., net)
Mitre.
Stanley's No. 12.....40%
Try.
Stanley's No. 20, new list...30&10%
" No. 12 and 14.....40%
Try and Bevel.
Stanley's .....40&5%
Try and Miter.
Fox's.....per doz. $6.75
Winterbottom's.....50%

SQUEEZERS, LEMON.
Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ..... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.
Blind.
Barbed.....per ℔ 9¼@9¾c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 20
Galvanized..... " 2 50
Netting.
Galvanized. ....per 100 ℔ 3 70
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hocks and Staples, and Hooks and Staples.....85-10&5%
Extra heavy.....85&5%

STEELYARD.
Discount 25%

STONES.
Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@6½
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26
Sythe.
Black Diamond.....per gro. $7 75
Clear Grit..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille ..... " 7 00
White Mountain..... " 6 50
Willoughby Lake..... " 6 25
Red End..... " 3 15

STOPS, BENCH.
Notchkiss'.....per doz. $3 50

STOPPERS, FLUE.
Common.....per doz. $0 32
Crown ..... " 45
Gem, flat, painted..... " 72
Gem, cor'd, decorated.. " 65
Kirch's..... " 90
Peerless.... .... " 63
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STRAPS.
Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.
Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's..... " 6 25

SWIVELS.
Malleable Iron.....per ℔ 6½c
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&10%
Gimp.....90&35%
Upholsters' Cut.....90&40&5%
Upholsters' Wire.....90&35%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.
Asses' Skin.....40&10%
Bend Leather.....25%
Patent Leather.....25%
Lufkin's Steel.....30%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case.....per doz. 95c@$1 25
Wood Back..... " $1.75@ 9 00
Glass..... " 15 50

TIES.
Bale.
Single Loop.....80&7½%
All other kinds.....65&10%
Cow—See "Chains."

TOOLS, SAW.
Atkins' Dexter.....per doz. $4 25
Atkins' Excelsior..... " 6 25
Disston's Universal.....40%
Miniature.
Smith & Hemenway 25%

TRAPS.
Fly.
Balloon.....per doz. $1 00
Harper's..... " 1 25
Game.
Newhouse.....50%
New Victor.....75&10%
Mole.
Reddick's.....per doz. $5 75
Mouse and Rat.
Wood Choker.....per hole $0 11
Tin Choker..... " 09
Delusion.....per doz. 85
Imitation Sight, Rat. " 80
Marty Rat..... " 6 75
Marty Rat Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse Imitation " 2 10
French Automatic.....each 3 60

TROWELS.
Brick.
Standard.....30%
Brade's.....10&7½%
Disston's.....30%
Rose's.....25%
Plasterers.
Standard 33⅓%
Disston's.....30%
W. & McP.....25%

TRUCKS.
Bags.....each $1 70
Handy..... " 1 50
Warehouse .....60&5%
No..... 1 2 3
Half Ironed.... $2.60 $3.40 $5.00
Full Ironed.... 3.90 5.75 6.75

TUBS, WASH.
Standard. Ex.
Nos..... 3 2 1 large
Per doz....$5.25 $6.25 $7.25 $ 9.75
Dowell.
Per doz.... 5.60 6.60 7.50 10.00
Cedar.
Per doz.... 6.50 7.50 8.25 .....
Indurated.
Per doz.... 7.20 7.95 9.45 11.70
Galvanized.
No..... 1 2 3
Per doz.....$5.25 $5.75 $6.50

TWINE.
Per ℔
3-ply Cotton Wrapping.....21c
4 " " " 21c
4 " " Extra Wrappings.....27c
4 " " " Hvy. Wrappings.26c
4 " " Wrapping on tubes...23c
3 " " " cones...23c
4 " " " " " ...23c
India Hemp, ¼-lb. balls.....18c
" " ½-lb. " 17c
" " ¾-lb. " .....doz. 65c
2-ply " ¼-lb. " 11½c
3-ply " ¼-lb. " 11½c
Jute Wrappings, ¼-lb. balls.....11½c
Jute Wool, 1-℔. balls.....6c
Seine.
Nos..... 6 9 12 15+
Soft, per ℔ .24 21½ 20½ 20
Med. " 21½ 20½ 20
Hard " 23½ 23½ 22
Staging, ¼-lb. ball, size 21.....20½c
" " " " 24.....20c
" " " " 27.....20c
Bagging " " 22c
3-ply "B" in hanks.....19c
4 " "B" " 19c
3 " "A" " 20c
3 " Silver Finish, in hanks....30c
Fodder or Lath.
150-strand 7½c
200-strand.....8½c

VISES.
Bonney's.....30%
Cherry's 30%
Parker's Oval Slide .....
.....50, 10, 2½% @ 50 10, 5, 2½%
Parker's Parallel.....15&20%
Parker's Victor.....10%
Parker's Combination.....50&10%
Solid Box.....60&5%
Adam's Mechanics'.....each 2 65
Williamson Universal .....25&10%

WARE.
Cast-Iron Hollow.
Ground.....50&10%
Unground .....60&5%
Extra Finished.....40&10
White Enameled.....40, 10&5%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔:
In. ½ ⅝ ¾ ⅞ 1
7½c 5½c 4c 3½c 3½c 3½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ⅝ ¾ ⅞ 1
8½c 6½c 5c 4½c 4½c 4½c 4½c

WASHING MACHINES—See Machines.

WEDGES.
Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.
Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz ..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.
Hitching .....per ℔ 2½c
Sash—F.O.B. Chicago ..pr ton $21 00

WHEEL BARROWS.
Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELS.
Corundum .....70&10&5%
Emery .....75&5%
Well In. 8 10 12 14
Per doz.....$1.90 $2.20 $3.00 $5.50

WIRE.
Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.15 $2.45
Less than car " .. 2.20 2.50
Brass.
In coils.....20%
In 1 ℔ spools, new list.....50&10%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....30&10%33⅓%
In 1 ℔ spools, new list ... 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $1.95
Nos 6 to 9, Galvl'd... " 2.25
Hair—New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles 70%
Coppered, full bdles 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools .....per ℔..26c
Plain—Small lots..... $2.00
Car lots 1.95
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard.....06%
Alligator ....70&10%
Always Ready..... 50%
Bemis & Call No. 2 Improved Pipe Wrenches ..... .60%
Coe's Standard.....40&10%
Girard's Agricultural.....75&50%
P. S. & W. Co.'s Agricultural 75&10%
" " Knife H'dle 50&5%
Wescott's "S".....33⅓%
Malleable "S".....per ℔. 05½c
Malleable..... " 05½c
Stillson Pipe .....60&5%
Trimo " 60%

WRINGERS.
Clothes.
No. 22, Guarantee....per doz.$28 00
No. 110, Guarantee.... " 29 00
No. 110, Brighton..... " 21 00
No. 22, Pioneer..... " 20 00
No. 2, Superb..... " 19 50
No. 730, Easy..... " [illegible]
No. 500, Royal .....
No. 350, Universal....
No. 300, Novelty.....
No. 310, Keystone ..
No. 100, Rival .....

ADVERTISER'S INDEX.

ALPHABETICAL LIST.

American Bolt & Screw Case Co..... 59
American Furn. Co..... 12
American Hardware Mfg. Co..... 61
American Lock Nut Co..... 51
Arcade Mfg. Co..... 50
Asphalt Ready Roofing Co..... 49
Atkins, E. C. & Co..... 64
Atlas Bolt & Screw Co..... 1
Atlas Mfg Co..... 64
Auld & Conger Co..... 46
Avery Stamping Co..... 57
Barler, A. C. Mfg. Co..... 5
Barnett, G. & H. Co..... 1
Beckman Bros..... 58
Beckwith, Estate of P. D..... 16
Benbow-Brammer Mfg. Co..... 56
Berger Bros. Co..... 46
Berger Mfg. Co..... 49
Bergstrom Stove Co..... 11
Bertsch & Co..... 51
Bishop, G. E..... 47
Black Silk Stove Polish Wks..... 45
Blanke & Hauk Supply Co..... 52
Blick-Williams Co..... 60
Bommer Bros..... 1
Bonnot Co..... 5
Boss Washing Machine Co..... 55
Boynton Furn. Co..... 9
Brammer, H. F. Mfg. Co..... 56
Brauer, A. G..... 44
Bridgeport Chain Co..... 1
Bridgeport Crucible Co..... 44
Burton, W. J. Co..... 48
Caldwell, Edwin C..... 55
Canton Clothes Dryer & Mfg. Co..... 53
Canton Fdy. & Mch. Co..... 45
Canton Steel Roofing Co..... 49
Champion Steel Range Co..... 5
Chapin-Stephens Co..... 58
Clark, Quien & Morse..... 50
Clayton & Lambert Mfg. Co..... 46
Clipper Lawn Mower Co..... 59
Columbus Bolt Works..... 1
Connors, Wm. Paint Mfg. Co..... 1
Cooney & Geiger..... 64
Cope, Geo. W. Pattern Works..... 44
Cortright Metal Roofing Co..... 49
Craig-Reynolds Fdy. Co..... 8
Cream City Cornice Co..... 48
Davis & Walcott..... 15
Denning Wire & Fence Co..... 59
Detroit Heating & Lighting Co..... 15
Detroit Register Co..... 18
Dieckmann, Ferd..... 47
Disston, Henry & Sons..... 62
Dixon, Jos. Crucible Co..... 43
Dreis & Krump..... 49
Dust, Wm. T. Co..... 44
Eller, J. H. & Co..... 49
Enterprise Mfg. Co..... 64
Enterprise Mfg. Co. of Pa..... 62
Evans Stamping & Plating Co..... 44
Excelsior Steel Furn. Co..... 14
Farwell, Ozmun, Kirk & Co..... 15
Ferrosteel Co..... 14
Follansbee Bros. Co..... 64
Folsom, C. G..... 60
Foster Stove Co..... 3
Franklin Specialty Co..... 58
Friedley & Voshardt..... 46
Garry Iron & Steel Co..... 47
Gem City Stove Co..... 2
Gerock Bros. Mfg. Co..... 51
Globe Machine & Stamping Co..... 51
Globe Ventilator Co..... 64
Grossius, John Furn. Co..... 11
Harrington & King Perforating Co..... 48
Haynes-Langenberg Mfg. Co..... 12
Henry & Scheible Co..... 15
Hill Dryer Co..... 60
Hoffman, Geo. W..... 45
Hooper, C. N..... 43
Hurwood Mfg. Co..... 57
Illinois Roofing & Supply Co..... 64
Independent Mfg. Co..... 60
Iwan Bros..... 46
Johnson, E. J. & Co..... 46
Kees, F. D..... 60
Kimball Bros. Co..... 51
Kinne Mfg. Co..... 14
Kinsey Mfg. Co..... 43
Kontny, John..... 3
Kramer Bros. Fdy. Co..... 47
Kruse & Dewenter..... 10
La Crosse Steel Roofing Co..... 46
Lalance & Grosjean Mfg. Co..... 61
Lawson Mfg. Co..... 60
Lee-Glass-Andreesen Hdw. Co..... 63
Lenawee Mfg. Co..... 59
Lufkin Rule Co..... 57
Major, A..... 63
March-Brownback Stove Co..... 4
Marion Stove Co..... 6
McClure Co..... 64
Mechanical Metal Mfg. Co..... 48
Merchant & Evans Co..... 48
Meyer, F. & Bro. Co..... 11
Meyer Furn. Co..... 11
Michigan Enamel Wks..... 45
Monroe Fdy. & Furn. Co..... 9
Morris, J. L. Stove Repair Co..... 44
Mueller, L. J. Furn. Co..... 10-15
Nat'l Enameling & Stamping Co..... 52
National Sheet Metal Roofing Co..... 48
Newport Sand Bank Co..... 44
Niagara Machine & Tool Works..... 51
North Bros. Mfg. Co..... 57
Obermayer, S. Co..... 45
O'Halloran & Jacobs..... 46
Ohio Tool Co..... 58
Oneida Community..... 1
Osgood Scale Co..... 64
Patric Furn. Co..... 8
Peck, C. A. Hdw. & Mfg. Co..... 50
Peters Cartridge Co..... 63
Pittsburgh Stove & Range Co..... 2
Porter, J. E. Co..... 50
Powers Bros..... 64
Pullman Mfg. Co..... 58
Quincy Pattern Co..... 44
Reeves, S. V..... 45
Remington Typewriter Co..... 53
Richards Mfg. Co..... 59
Rochester Radiator Co..... 12
Rohrbacher & Allen..... 11
Rulofson Co., A. C..... 58
St. Louis Electrotype Fdy..... 51
Sayre Stamping Co..... 44
Schofield & Co..... 60
Schreiber-Conchar Mfg. Co..... 51
Schwab & Sons Co..... 10
Security Lightning Rod Co..... 58
Sheldon School..... 43
Signal Mail Box Co..... 60
Silver & Co..... 59
Smith Bros. Mfg. Co..... 52
Smith, Chas. Co..... 6
Sperry, D. R. & Co..... 52
Stanley Rule & Level Co..... 58
Steiner-Heinkel & Co..... 56
Sterling Fdy. Co..... 48
Stowell Mfg. Co..... 47
Stowell Mfg. & Fdy. Co..... 14
Stuber & Kuck..... 45
Sycamore Wagon Wks..... 53
Sykes Steel Roofing Co..... 47
Taplin Mfg. Co..... 58
Titchener & Co..... 56
Utica Drop Forge & Tool Co..... 57
Van, John Range Co..... 4
Vedder Pattern Works..... 44
Victor Stamping Co..... 51
Voss Bros. Mfg. Co..... 56
Walker Tool Co..... 51
Waterloo Register Co..... 13
Weiss, H. & Co..... 56
Weller Pattern Co..... 44
Whitacre Mfg. Co., J. E..... 47
White Lily Washer Co..... 56
Willard, Wm. G..... 5
Williams Stove Lining Co..... 45
Wise Furn. Co..... 12

CLASSIFIED LIST.

Advertising Agency

Caldwell, Edwin C., Burlington, Wis

Ash Sifters

Hill Dryer Co., Worcester, Mass

Augers—Post Hole

Iwan Bros., Streator, Ill

Boilers—Wash

Steiner-Heinkel & Co., St. Louis, Mo

Bolts

Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Wks., Columbus, O

Brass

Merchant & Evans Co., Philadelphia, Pa

Cans

Blanke & Hauk Supply Co., St. Louis, Mo
Stuber & Kuck, Peoria Ill

Carpenters' Tools

Hurwood Mfg. Co., Bridgeport, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., N. Britain, Ct

Cartridges

Peters Cartridge Co., Cincinnati, O

Ceiling Machinery

Canton Fdy. & Mch. Co., Canton, O

Ceilings—Metal

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Cream City Cornice Co., North Milwaukee, Wis
Eller, J. H. & Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Illinois Roofing & Supply Co., Chicago, Ill

Cement Tools

Kramer Bros. Fdy. Co., Dayton, O

Chains

Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chimney Tops

Iwan Bros., Streator, Ill
Kramer Bros. Fdy. Co., Dayton, O

Clothes Dryers

Canton Clothes Dryer & Mfg. Co., Canton, O
Hill Dryer Co., Worcester, Mass

Coal—Artificial

Williams Stove Lining Co., Taunton, Mass

Coal Hods

Victor Stamping Co., Cleveland, O

Coffee Mills

Arcade Mfg. Co., Freeport, Ill
Enterprise Mfg. Co., of Pa., Philadelphia

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Berger Bros. Co., Philadelphia, Pa
Berger Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis

Copper

Merchant & Evans Co., Philadelphia, Pa

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Cream City Cornice Co., Milwaukee, Wis
Eller, J. H. & Co., Canton, O

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dreis & Krump, Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Corrugated Iron

Garry Iron & Steel Co., Cleveland, O
McVoy, John & Co., Chicago, Ill

Cream Separators

Blanke & Hauk Supply Co., St. Louis, Mo
Smith Bros. Mfg. Co., Indianapolis, Ind

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis

Cutlery

Ohio Tool Co., Columbus, O

Dairy Supplies

Blanke & Hauk Supply Co., St. Louis, Mo

Dampers

Arcade Mfg. Co., Freeport, Ill
Dust, Wm. T. & Co., Detroit, Mich
Sayre Stamping Co., Sayre, O

Dies

Canton Fdy. & Mch. Co., Canton, O
Globe Mch. & Stamp Co., Cleveland, O

Door Catches

American Hdw. Co., Ottawa, Ill

Door Hangers

Stowell Mfg. & Fdy. Co., South Milwaukee, Wis
Richards Mfg. Co., Aurora, Ill

Drain Cleaners

Iwan Bros., Streator, Ill

Drills

North Bros. Mfg Co., Philadelphia, Pa

Drop Presses

Canton Fdy. & Mch. Co., Canton, O

Dust Traps

Davis & Walcott, Atchison, Kan

Eaves Trough

Canton Fdy. & Mch. Co., Canton, O
Cream City Cornice Co., North Milwaukee, Wis
Eller, J. H. & Co., Canton, O
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Whitacre Mfg. Co., J. E., Rockford, Ill

Egg Beaters

Taplin Mfg. Co., New Britain, Ct

Elbows—Conductor Pipe

Dieckmann, F., Cincinnati, O

Electrotypes

St. Louis Electrotype Fdy., St. Louis, Mo

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enamel Ware

Avery Stamping Co., Cleveland, O
La Lance & Grosjean Mfg. Co., Chicago, Ill
Nat'l Enamel. & Stamp. Co., Milwaukee

Enameling

Michigan Enameling Wkr., Kalamazoo, Mich

Fences

Denning Wire & Fence Co., Cedar Rapids, Ia

Files

Barnett, G. & H. Co., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers

Stuber & Kuck, Peoria, Ill

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Bishop, G. E., Dowagiac, Mich
Canton Fdy. & Mch. Co., Canton, O
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Furnaces—Hot Air

American Furn. Co., St. Louis, Mo
Beckwith, Estate, P. D. Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Bonnot Co., Canton, O
Boynton Furnace Co., Chicago, Ill
Canton Fdy. & Mch. Co., Canton, O
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Excelsior Steel Furnace Co., Chicago, Ill
Grossius Furn. Co., Cincinnati, O
Haynes-Langenberg Mfg. Co. St. Louis
Henry & Scheible Co., Cleveland, O
Kontny, John, Chicago, Ill
Kruse & Dewenter, Indianapolis, Ind
March-Brownback Stove Co., Pottstown, Pa
Meyer Furn. Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Patric Furnace Co., Springfield, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Rohrbacher & Allen, Akron, O
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Wise Furn. Co., Akron, O

Furnace Pipe and Fittings

Excelsior Steel Furn. Co., Chicago, Ill
Farwell, Ozmun, Kirk & Co., St. Paul, Minn
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis
Nat'l Enam. & Stamp. Co., Milwaukee

Furnace Repairs

Dust, Wm. T. Co., Detroit, Mich
Morris Stove Repair Co., Chicago.

Hammers
Franklin Specialty Co., Reading, Pa

Hangers—Trouser
Pullman Mfg. Co., Rochester, N. Y

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha

Hardware Specialties
Independent Mfg. Co., Cleveland, O

Hatchets
Franklin Specialty Co., Reading, Pa

Hay Carriers
Porter, J. E. Co., Ottawa, Ill
Richards Mfg. Co., Aurora, Ill
Stowell Mfg. & Fdy. Co., Milwaukee

Heaters—Steam and Hot Water
Boynton Furnace Co., Chicago, Ill
Craig-Reynolds Fdy. Co., Dayton, O
Haynes-Langenberg Mfg. Co., St. Louis
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges—Spring
Bommer Bros., Brooklyn, N.Y
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Ice Picks
Arcade Mfg. Co., Freeport, Ill
Franklin Specialty Co., Reading, Pa
Hurwood Mfg. Co., Bridgeport, Ct

Kitchen Utensils
Arcade Mfg. Co., Freeport, Ill
Enterprise Mfg. Co. of Pa., Philadelphia
Silver & Co., Brooklyn, N.Y
Taplin Mfg. Co., New Britain, Ct

Lanterns
Berger Mfg. Co., Canton, O
Hurwood Mfg. Co., Bridgeport, Ct

Lawn Mowers
Clipper Lawn Mower Co., Dixon, Ill

Levels
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lightning Rods
Security Lightn'g Rod Co., Burlington, Wis

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Folsom, C. G., South Bend, Ind
Independent Mfg. Co., Cleveland, O
Peck, C. A., Hdw. & Mfg. Co. Berlin, Wis
Signal Mail Box Co., Joliet, Ill
Smith Bros. Mfg. Co., Indianapolis, Ind

Meat Choppers
Enterprise Mfg. Co. of Pa., Philadelphia

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

Mica
Brauer, A. G., St. Louis, Mo
Dust, Wm. T. Co., Detroit, Mich
Morris Stove Repair Co., Chicago, Ill

Miters
Whitacre Mfg. Co., J. E., Rockford, Il

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Nuts
American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus O

Oil Cans
Cooney & Geiger, Indianapolis, Ind

Ovens
Schofield & Co., Freeport, Ill

Paints
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pattern Letters
St. Louis Electrotype Fdy., St. Louis

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Planes
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., New Britain, Ct

Plyers
Hurwood Mfg. Co., Bridgeport, Ct
Utica Drop Forge & Tool Co., Utica, N.Y

Printing
Blakely, Vern. North Girard, Pa

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Canton Fdy. & Mch. Co., Canton, O
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Walker Tool Co., Lansing, Mich
Weiss, H. & Co., New York, N.Y

Radiators
Rochester Radiator Co., Rochester, N.Y

Rasps
Barnett, G. & H. Co., Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Registers
Detroit Register Co., Detroit, Mich
Ferrosteel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schreiber & Conchar Mfg. Co., Dubuque, Ia
Schwab & Sons Co., Milwaukee, Wis
Stowell Mfg. & Fdy. Co., Milwaukee, Wis
Waterloo Register Co., Waterloo, Ia

Roofing—Asphalt
Asphalt Ready Roofing Co., New York
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Cortright Metal Roof. Co., Philadelphia
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Sykes Steel Roofing Co., Chicago, Ill

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

Rules
Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sad Irons
Blacklock Fdy., So. Pittsburg, Tenn
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Schreiber & Conchar Mfg. Co., Dubuque, Ia

School of Salesmanship
Sheldon School, Chicago

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw and Saw Sets
Atkins, E. C. & Co., Indianapolis, Ind
Disston, Henry & Sons, Philadelphia, Pa

Scales
Beckman Bros., Des Moines, Ia
Osgood Scale Co., Binghamton, N.Y

Screen Hinges
Kees, F. D., Beatrice, Neb

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O

Screws—Hand
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O

Screw Drivers
Hurwood Mfg. Co., Bridgeport, Ct
North Bros. Mfg. Co., Philadelphia, Pa

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Kinne Mfg. Co., Minneapolis
Kinsey Mfg. Co., Dayton, O

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Interstate Steel Co., Brackenridge, Pa
McVoy, John & Co., Chicago, Ill

Shelf-Brackets
Atlas Mfg. Co., New Haven Ct

Shelving—Hardware
American Bolt & Screw Case Co., Dayton, O

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck, Peoria, Ill

Skylight Gearing
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Solder
McVoy, John & Co., Chicago, Ill

Soldering Furnaces
Clayton & Lambert Mfg. Co., Detroit

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Globe Machine & Stamping Co., Cleveland, O

Staples
Titchener & Co., Binghamton, N.Y

Stoves and Steel Ranges
Beckwith, P. D. Estate Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Champion Steel Range Co., Cleveland, O
Foster Stove Co., Ironton, O
Gem City Stove Co., Dayton, O
Kontny, John, Chicago, Ill
March-Brownback Stove Co., Pottstown, Pa
Marion Stove Co., Marion, Ind
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Van. John Range Co., Cincinnati, O
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Independent Mfg. Co., Cleveland, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Silver & Co., Brooklyn, N.Y

Stoves—Oil
Barler, A. C. Mfg. Co., Chicago, Ill
Nat'l Enamel. & Stamp. Co., Milwaukee
Silver & Co., Brooklyn, N.Y

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Casters
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct
Nickel Plate Stove Polish Co., Chicago
Williams Stove Lining Co., Taunton, Mass

Stove Lifters
Kramer Bros. Fdy. Co., Dayton, O

Stove Linings
Williams Stove Lining Co., Taunton, Mass

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Excelsior Steel Furn. Co., Chicago, Ill
Kinne Mfg. Co., Minneapolis

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago

Stove Repairs
Brauer, A. G., St. Louis, Mo
Dust, Wm. T. Co., Detroit, Mich
Kramer Bros. Fdy. Co., Dayton, O
Morris, Stove Repair Co., Chicago, Ill
Reeves, S. V., Haddonfield, N.J

Strainers-Sink
Vrooman, F. H. & E. B., Chicago, Ill

Sugar Kettles
Sperry & Co., Batavia, Ill

Tapes
Lufkin Rule Co., Saginaw, Mich

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
McVoy, John & Co., Chicago, Ill
Merchant & Co., Philadelphia, Pa

Tinware
Lalance & Grosjean Mfg. Co., Chicago
Nat'l Enamel. & Stamp. Co., Milwaukee
Stuber & Kuck, Peoria, Ill

Toasters
Rulofson Co., A. C., San Francisco

Toilet Paper Holders
Franklin Specialty Co., Reading, Pa

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa

Typewriters
Remington Typewriter Co., Chicago

Ventilators
Davis & Walcott, Atchinson, Kans
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Mechanical Metal Mfg. Co., Phila, Pa
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Wagons
Sycamore Wagon Wks., Sycamore, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Bose Washing Machine Co., Cincinnati, O
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Water Coolers
Major, A., New York, N.Y

Wire Anchors
Lenawee Mfg. Co., Adrian, Mich

Wire Stretchers
Smith, C. F., & Co., DeKalb, Ill

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Titchener & Co., Binghamton, N.Y

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale—Clean stock of hardware and furniture, store fixtures, 2 horses, 2 wagons, all up-to-date; invoice about $7,000. Located in one of the best Polish districts in Milwaukee. Good reason for selling. Address "Milwaukee," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 24

For Sale—Hardware business, stock of about $3,000, liberal discount; situated in town of about 25,000 in south-central Wisconsin. Complete tin-shop in connection; fine established trade. Present owner has been in same location 14 years. Store in best business portion of city. Wish to retire on account of age and health. Address "Gaar," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 24

For Sale—Best hardware, implement and vehicle and harness business, also building, in best farming section of central Illinois, town of 12,000 people; stock and building will invoice about $35,000; yearly sales $60,000 to $75,000; ill health reason for selling; business established 39 years. Address "Section," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 24

For Sale—1 to 20-inch hand folder, Peck, Stowe & Wilcox, in good condition. Address Blaine & Sayers, Cedar Rapids, Iowa. 24

For Sale or Exchange—80 acres of good southern Iowa farm land for stock of implements or hardware, or stock of hardware and implements. For further information address "R. R.," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

For Sale—Good clean stock of hardware, sporting goods, etc., with complete tinshop in connection, in best town and county in east central South Dakota; population, 3,500; invoice, $5,500; sales up to $16,000. No trades. Address Gullick & House, Brookings, S. D. 23

For Sale—New clean stock of hardware and store building in new growing town in South Dakota; best farming country surrounding. No exchange. Best reasons for selling. Address "Best," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

For Sale—Will sell for cash clean stock of hardware, invoice about $3,000, in central Iowa; good location and large territory; only one other stock in town of 600 population. Reason for selling, poor health. Address "Iowa," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

For Sale—Good stock of hardware, $3,800; considered best location in Iowa. Good reason for selling. Address "Good," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23

For Sale or Exchange—Stock of hardware, paint and crockery valued at $4,000; desirable location. Want property in Chicago; retiring from business. Address L. Greenheid, 767 Armitage Ave., Chicago. 23

GREAT OPPORTUNITY.

For hardware and jobbing shop. Best opening in state. Right in heart of coal belt, 80 miles west of Chicago. No hardware there. Population 600; mostly German. Factory building to employ 2,000 men; want partner with $1,500. Am expert mechanic on sheet metal, plumbing, steam, hot air, jobbing work. Have full set of tools, brake, etc., shop material. Married; age 35; speak German. If you ain't a hustler don't answer. No age limit. Address Opportunity, care AMERICAN ARTISAN 69 Dearborn St., Chicago. 18

TINNERS' TOOLS.

Wanted—To buy good second-hand brake, 3 or 4 ft. Address Blaine & Sayers, Cedar Rapids, Iowa. 24

For Sale—One set of tinner's tools, in good working condition; very reasonable. Address "Sale," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

For Sale—Cheap; one No. 13 Moore's pat. double seamer with standard, one Stowe's pat. gutter beader, 20-inch, ½ bead, one 24-inch Granis groover; all in first-class condition. Address "Hardware," 404 Fourth Ave., Moline, Ill. 22

Wanted—To buy one 8-foot cornice brake, one 30-inch bar folder, one cross lock seamer, one combined punch and shear, three iron bench plates and one Beakhorn stake. State whose make and condition of machines and best price f. o. b. your city. Address Albert B. Guenther, Owensboro, Ky. 21

For Sale—A bargain; one stove pipe crimper, one small burr, one 30-inch Niagara stove pipe folder. Address Albert B. Guenther, Owensboro, Ky. 21

Wanted—To buy second-hand folder, one 30-inch roller and 30-inch square shear. Address J. Mecklenburg, 1522 Milwaukee ave., Chicago. 21

Wanted—Prices on wrought boiler heads, galvanized ¼-inch (flanged), 1½ inches, dished in 4 inches, size 24 inches, punched ¼-inch holes, 1-inch from center to center of hole; also ditto, 5-16 inches, 30 inches and 34 inches. Address G. B. Lahr, Juda, Wis. 21

HELP WANTED.

Wanted—At once, good, steady, sober tinner and furnace man, who can do all kinds and make estimates on all kinds of furnace, tin work, slate roofing and steel ceiling work; must be able to figure from plans; must also be able to go out and take orders; references required; state wages in first letter. Address N. Reinhardt's Sons, Lincoln, Ill. 24

Wanted—First-class tinner. Inquire Hall Bros., Lincoln, Neb. 24

Wanted—Salesman to sell on commission, a line of air tight heaters; first-class in construction with special selling features. Liberal commission, with commissions on mail orders. Address, at once, C. H. Wurst Co., Quincy, Ill. 24

Wanted—Good tinner and furnace man; will pay $2.50 per day; steady work all the year around. Address Woelfel & Gundlach, Lincoln, Ill. 24

Wanted—First-class tinner, for both inside and outside work, at once. Address B. Neal, Marion, Wis. 24

Wanted—First-class tinner and plumber and first-class hardware clerk that can help around machinery. Address Bradberry Bros., Hurley, S. D. 24

Wanted—An all-around first-class tinner, who understands furnace work, plumbing, and prefer one who has some knowledge of hot water heating. Steady position to good man; state references and wages wanted. Address E. C. Dedrick, Langdon, N. D. 24

Wanted—First-class tinner; must be a good furnace man. Good wages. Address Willmeroth & Frost, Peru, Ill. 23

Wanted—Tinner, by the year; assortment and job worker. Address Rutter's Hardware, Warsaw, Ind. 23

Wanted—Tinner who can do plumbing; please state wages wanted in first letter. Good position for right party. Address A. W. Kuhn, 920 Milwaukee Ave., S. Milwaukee, Wis. 23

Wanted—At once, good all around tinner for inside and outside work; must be sober and experienced. Steady work year around. Address J. T. Crampton, Aurora, Ill. 23

Wanted—Tinner and slater who can erect galvanized cornices; must be sober and reliable. Address S. C. Fouts, Middletown, Ohio. 22

Wanted—At once, good tinner for general job work; will pay all you can earn; state age and experience. Address M. R. O'Neill, Wholesale and Retail Hardware, Fargo, N. Dak. 22

Wanted—Tinner; at once, an all around man who understands furnace work, pump work and all kinds of job work in the tinning line; state wages wanted in first letter. Address W. D. Kable, Kirkland, Ill. 22

Wanted—An all around man for tinning, plumbing, heating and general work; steady work in town of 3,000; good wages to an active, steady hustler who is reliable; references wanted. Address "References," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22

Wanted—Good all around tinner for inside and outside work; must be sober; German preferred; state experience and wages; steady work all year. Address H. Wehmhoefer, Beecher, Ill. 21

Wanted—At once, an all around man; one who understands plumbing, furnace work, tinning inside and outside; state wages; steady job. Address Judt-Craghead Hdw. Co., Fulton, Mo. 21

Wanted—A tinner with 3 or 4 years' experience in shop as second man; good chance for a good man to work up, and for a live, honest, sober man will give $10 a week to start. Address Foreman, 1121 Summer St., Grinnell, Iowa. 21

Wanted—Tinner who understands furnace work, at once; must give references. Address H. C. Wienecke, Glencoe, Ill., Box 95. 20

Wanted—Salesman to carry as a side line in territory east of the Mississippi River a new patent door closer; ready seller; liberal commission. Address J. H. Banks, Mfg. Agt., Fremont, Neb. 20

Wanted—Young man to make himself generally useful in and around a hardware store on the north side of Chicago State experience and wages. Address "North," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago. 20

Wanted—Three good tinners and furnace men. Address Hoernel Hardware Co., Racine, Wis. 20

Wanted — Tinner who understands plumbing; small town, but good surrounding country; must know how to figure on work; good opportunity for the right man. Address Chas. Weydert, Bayou Sara, La. 20

Wanted—Foreman for tin shop. Employ half a dozen men. We do all kinds of roofing, heating, and galvanized piping. Immediate employment to right man. Address Watson Bros., Marinette, Wis. 20

Wanted—At once, first-class tinner for inside and outside work; knowledge of cornice work not required, but must be a good jobber; steady job to a good man. Address Messenger & Parks, Aurora, Ill. 19

Wanted—A tinner who is looking for a steady job; a man who can do tinwork of all kinds; has some knowledge of furnace and hot water work and is willing to do such work as comes to the ordinary tinshop. Cornet or clarinet player preferred. Address E. R. Gardner, Monticello, Ind. 19

SITUATIONS WANTED.

Wanted—A chance to finish learning the tinner's trade; I have served 2 years; am 20 years old, strong and active. Can do bookkeeping. Would like position at once; state wages in first letter. Address Box 26, Columbus, Wis. 24

Wanted—An expert electroplater in all high grade plating, oxidizing and lacquering desires position to take complete charge of plating and polishing; prefer southwest; strictly sober; best of references. Address N. P., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 24

Wanted—Situation as tinner; good general jobbing hand, in or out doors, furnace work, etc.; must be steady position. Address S. W. Wiltshire, 336 Florida St., Milwaukee, Wis. 22

Wanted—A chance to finish learning the tinner's trade; I have served two years; am 17 years old, strong and active. Address Cecil Clutterham, 540 West 79th St., Chicago. 22

Wanted—Situation by young German who cannot speak English; can do all kinds of automobile repairing; prefers to clerk in store. Address Chris Westerman, 324 N. Ashland ave., Chicago. 22

Wanted—Position by German-American tinner, plumber and furnace man, with seven years' experience; can do in and outside work; sober and reliable; A1 references. Address H. O. Ebert, Lakefield, Minn. 20

Wanted—Position as manager for a plumbing, heating and tinning business; 18 years' experience; can estimate from plans; first-class references; strictly sober and reliable. Address "Box P. N.," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago. 20

More Sales and Better Profits

That is what we want, isn't it?

It is certainly the wish of every manager and head of a business house personally known to us. It spells business growth, power and leadership. It stands for a brighter profit sheet and for all-round satisfaction.

Your salespeople have the same longing. To them it means better pay, promotion and appreciation. It unlocks opportunity.

Whether you are the head of a concern or its humblest clerk, we can furnish you with the Science—(Organized Common Sense)—that guarantees the sales and profits as desired. It is not hard to learn and it has never yet failed and never can fail, because it is all under the leadership of nature's laws.

It is worth your while, and that of all your employes, to know what this Science is and how readily it can be acquired. Full information on request together with our new illustrated prospectus.

THE SHELDON SCHOOL, 1550 Republic Building, CHICAGO

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc., Trades.

This Agency issues as complete and reliable book of credit ratings fo this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. The *paying record* is based upon *ledger experience* of credit men everywhere.

You buy credit information. Isn't it the part of a good buyer to post himself thoroughly on the merits of a book of ratings, gotten up especially for his trade by men with ample capital and who are thoroughly trained in this class of work and who make a *specialty* of it?

Terms of subscription can be had by addressing Executive Office

Iron and Hardware Mercantile Agency.

157 Federal Street. BOSTON, MASS.

SPECIAL NOTICES.

GALVANIZER WANTED

A man with experience at galvanizing pails, tubs, etc. State salary wanted, where you have been employed and age. "Superintendent," Flat 3, No. 183 14th St., Milwaukee, Wis. 2t-24

FOR SALE

Hardware stock and building; located in central Wisconsin, in best farming and dairy section in the state; city population 7,000 and growing; business averages $35,000 a year; location best in city. Address "Central Wisconsin," care AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3t-24

FOR SALE

Complete volumes of THE AMERICAN ARTISAN AND HARDWARE RECORD for 1902 and 1903, price $3.00 for each year. Address Retired, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Illinois.

WANTED

Salesman to carry as a side line a few good things in territory west of Ohio. Good sellers. Commission.

ILLINOIS ROOFING & SUPPLY CO., 23 Lake Street, Chicago, Ill.

23-3t.

PRINTING

Envelopes, XXX, 6¾ (white) $1.65 per thousand, in 2 or 5 thousand lots, prices low on all kinds of printing. I make a specialty of manufacturers and merchants printing, write me for prices on any kind of printing. V. BLAKELY PRINTERY, Milesgrove, Pa.

C. N. HOOPER, Dubuque, Iowa.

VITREOUS ENAMELING TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

We are prepared

to bid on specialties in metal work or manufacture them on royalty.

KINSEY MFG. CO., DAYTON, OHIO

W. F. GUENTHER & SONS, Owensboro, Ky., write:

"We feel that we cannot get along without THE AMERICAN ARTISAN and HARDWARE RECORD."

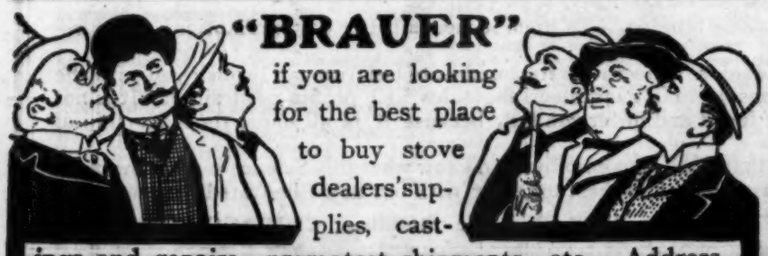
DIXON'S STOVE CEMENT.

Applied easily. Dries rapidly. The best repair for cracked or worn fire-brick. Circular 18-L and sample upon request.

JOSEPH DIXON CRUCIBLE CO., ... JERSEY CITY, N. J.

Do You Buy your stove Bolts from one man, your stove putty from Smith, your stove repairs from Jones, your water fronts from Brown? We'll supply you with everything in the Stove Supply and Repair line—quickly, carefully and reasonably—and you'll save in freight and express. *A trial order?*

WM. T. DUST COMPANY, 30 Macomb Street, DETROIT, MICH.



"BRAUER" if you are looking for the best place to buy stove dealers' supplies, castings and repairs—promptest shipments, etc. Address,

316-318 North Third St. St. Louis, Mo.

Champion Stove Clay

The only Stove Lining made of crucible materials.

Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.

Order it from your jobber.

The best and most refractory lining made.

Bridgeport Crucible Co. Bridgeport, Conn.

THE ACME OVEN THERMOMETER

With NEW IMPROVEMENTS is ready for your inspection

SEND FOR SAMPLE

Evans Stamping and Plating Co.

TAUNTON, MASS.

C. H. MATTHEWS, Detroit, Mich. (Western Agent.)

STOVE REPAIRS

Range Repairs
Furnace Repairs

J. L. Morris Stove Repair Co.

CHICAGO, ILL.

WELLER PATTERN Co

DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

QUINCY, ILL.

The GEO. W. COPE Stove Pattern Works Cor. Brush and Woodbridge Streets, DETROIT, MICHIGAN

QUINCY PATTERN Co
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

PATTERNS

For Stoves and Heaters.

First-class in wood and iron.

Vedder Pattern Works, Troy, N.Y.

Established 1853.

THE ONLY MOLDING SAND

that may be used as mined, without admixture or previous preparation, adapted to the finest castings. Produces best work at low cost.

Highest Award at World's Fair, St. Louis. Catalogue and information on request.

The Newport Sand Bank Co., Incorporated **Newport, Ky.**

Chicago Office, 122 Franklin St., KNAPP BROS., Representatives

See the Corrugation!

Note the method of corrugating and looping to prevent warping and to strengthen the plate. The handle is rigidly clamped to the stem. The stem is sharply pointed—easily driven through pipe and notched to engage edge of plate; held absolutely in place by the spring, will not turn. Plate stamped from nickled steel. The

Uncle Sam Damper

is the oldest and most reliable sheet steel damper made. It is light, strong, durable. Write for circulars.

SAYRE STAMPING COMPANY, SAYRE, PA.

Conversation Between Two Professional Stove Blackers, John and Andrew.

JOHN:—Say, Andrew, I notice that you spit black all the time.

ANDREW:—I can't help it, my throat and lungs are full of it all the time, ain't yours?

JOHN:—NO SIR, MY BOSS buys BLACK SILK STOVE POLISH, the polish that's clean, not a particle of DUST or DIRT comes from BLACK SILK STOVE POLISH in using and it makes a quick shine. I polish TWO stoves to your ONE. OUR STOVES SHINE like BLACK SILK. BLACK SILK STOVE POLISH makes a SHINE THAT STAYS.

Black Silk Stove Polish Works,
Sterling, Illinois.

The ECLIPSE Nested Stove Pipe Thimble

BEST ON THE MARKET

PATENT PENDING

Saves 80 per cent. of room.
Is stronger than a hand made riveted thimble.
Is always ready to hook together.
Is made that the lug passes through two slots and then tied.
The lug is always on top; therefore the LUG is not an objection to the entering stove pipe.
It is always kept nice and clean in a box; therefore no unsightly, rusty looking thimbles to adorn the stores. Galvanized iron; 5, 6 and 7 inch.

STUBER & KUCK, Manufacturers of Pieced Tinware and all Styles Flour Sifters. **Peoria, Ill.**

Watch for our next advt.

CAST IRON WASHERS, WEIGHTS, GRATE BARS, CASTINGS,

OF ALL KINDS.

THE CANTON FDY. & MACH, CO., Canton, Ohio,
Founders, Machinists, Pattern Makers.

WE SOLICIT YOUR ORDERS FOR

GENUINE PORCELAIN ENAMELING

of all kinds and in all colors on steel sheet and cast iron.

JOB WORK IS OUR SPECIALTY

therefore we can give you prompt service. We make **Special Enamels** to suit your requirements. It will pay you to write us when you have any work done in our line.

MICHIGAN ENAMELING WORKS, Kalamazoo, Mich.

100 Tinners' Patterns

Complete for $1.00

Sent Postpaid on Receipt of Price.

DANIEL STERN, 69 Dearborn Street, CHICAGO.

Williams Stove Lining Company

TAUNTON, MASS.

MANUFACTURERS OF

STOVE LININGS

INCANDESCENT GAS FUEL
AND
EAGLE STOVE CLAY

Largest and Most Modern Plant. Unequaled Facilities. TRY US.

If You Want Quality

IN plumbago get a sample of our No. 702 Pure Ceylon Plumbago, test it—we don't care how severe the test is—it will do all we claim, and more.

SUCCESSFUL foundrymen everywhere use our No. 702. Are you successful?

May we send you a sample?

THE S. OBERMAYER CO.
CINCINNATI
CHICAGO PITTSBURG
"The House of Quality and Service."

BARKEEPER'S FRIEND

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver

can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Highest Award:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.

Let us send you a FREE SAMPLE.

GEO WM. HOFFMAN
295 E. Washington St.
INDIANAPOLIS, IND.

FOR SALE BY JOBBING TRADE

NOTICE

I can furnish COMPLETE STOVES, HEATERS and RANGES and REPAIRS as formerly manufactured by THE LEIBRANDT & McDOWELL STOVE CO.

S. V. REEVES,
114 E. Park Ave., Haddonfield, N. J.

Sheet Metal Architectural Ornaments, Statuary, Etc.

ART METAL CEILINGS

Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper.

Galvanized Steel Tanks for all Purposes.

FRIEDLEY & VOSHARDT SEND FOR CATALOGUE A 21 194-202 Mather St., CHICAGO, ILL.

STEEL CEILINGS!

DROP A POSTAL FOR New Cat!!

ROOFINGS
SIDINGS
EAVE-TROUGH-CONDUCTOR

CORNICES!

SKYLIGHTS!

QUICK SHIPMENTS!!!

La Crosse Steel Roofing & Corg. Co., La Crosse, Wis.

ROOFING SLATE

SLATE BLACKBOARDS

E. J. JOHNSON & CO.

38 PARK ROW, NEW YORK
Quarries: PENNSYLVANIA AND VERMONT

Prices quoted delivered anywhere. Booklet and complete Price List on application. Wire inquiries given quick attention

O'HALLORAN & JACOBS,

ROOFING SLATE

SLATERS' SUPPLIES.

829-830 Park Building, PITTSBURG, PA.

Write for Prices on

ROOFING SLATE

THE AULD & CONGER CO.
Manufacturers and Dealers
CLEVELAND, O.

No. 40

Berger's Wrought Star Ears

This is as fine an ear as can be made. Every piece is perfect, with fine finish, nicely tinned, same size and thickness as our malleable Star ears. No. 30 corresponds to malleable No. 3, etc. Furnished in gross boxes or in bulk to suit the purchaser. Samples mailed free upon request.

Berger Bros. Co., Mfrs.

Office and Store, 237 Arch St.,
Factory, 3114-16-18-20 N. 17th St.,
Warerooms, 100-02-04 Bread St.,
PHILADELPHIA

"WEARY WILLIES"

$4.50 Net

seldom use or need a good up-to date fire pot. They are too busy trying to collect the living they imagine the world owes them. **Wide-awake earnest, honest, succesful men** do use and need the best of tools as they realize they must not be handicapped if they wish to succeed. **They know that the No. 5 Fire Pot has so many advantages over other makes that its entire cost is often saved on the first job.** Our catalog is free. It tells all. Jobbers sell at factory price. "Your money back if you are not pleased."

Clayton & Lambert Mfg. Co.
Detroit, Mich, U. S. A.

CUT THIS OUT

To the Publishers **The American Artisan and Hardware Record**
69 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name .....

Address .....

Town ..... State .....

FLAT CRIMP EXPANDING ELBOWS

No. 1 No. 2 No. 3

Round Corrugated
Plain Round

Octagon
Polygon

Square "H"
Square "B"

PATENTED JUNE 4, 1895

Made of One Piece

None Genuine
Without Signature

F. Dieckmann

Station B, CINCINNATI

Roofing versus Readiness

Read the advertisements of any trade paper, listen to the tale of any drummer, peruse the catalog of almost any institution and you will learn about **quality** and **prices.** You will hear that Jack Nimblelegs stole a march on all competitors and is offering a genuine charcoal iron 10 per cent. off other quotations. You will learn that his competitor has discovered a new process whereby tin plate can be made cheaper and better. But you will strike no argument requesting patronage because of superior **service.**

Service counts. It counts just as much as **quality** and **price** and perhaps more. The average customer values quick work, quick shipments. Other things being equal he will invariably give his order to the man who is in a position to do a job promptly.

Our house has long been known as the house of **quality** and **economy.**

It has always been the house of good **service.** We combine all **three** features.

Our immense stock of Conductor Pipe, Eaves Trough, Gutters, Roofing, Siding, Corrugated Iron, Tin and Terne Plates, etc., is varied and thorough. You can find anything you want and what's more we will get it out for you the same day the order is received.

Garry Iron & Steel Company

CLEVELAND, OHIO

Outside Bead

The Kind You're Looking For

The famous One-Piece Miter, made of one piece of metal, galvanized or tinned after being formed. Has more space at the bend than can be gotten in a pieced miter. There is therefore no overflowing of water. Fits all standard gutters, single or double bead, slip or lap joint, inside or outside turn.

Write for information.

It is imitated. Get the original.

J. E. Whitacre Mfg. Co.

ROCKFORD, ILL.

Inside Bead

The Dayton Swing Chimney Top

The easiest turning chimney top made. Guaranteed to work where others fail. All sizes from 4 to 24 inches.

Manufactured by

The Kramer Bros. Fdry. Co.

DAYTON, OHIO

Largest Manufacturers of Swing Tops in the World

It Is Acknowledged

PRICE

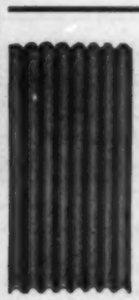
3½-in.	50
4 "	60
4½ "	65
5 "	75
6 "	1 00

by the best workmen to be the only way to close the end of an eave trough, as corrugations are **Proof Against Frost.**

Order a set of tools today from any jobber or tinner's supply house.

G. E. BISHOP, HARDWARE

DOWAGIAC, - MICH.



Freight charges are sometimes heavy charges. We can save you money.

We are large manufacturers — small profits, many sales.

SYKES STEEL ROOFING CO.

Chicago, Ill. and Niles, Ohio.

Mfrs. Steel Roofing, Corrugated Iron, etc.

Southnek & McElrath,
Moville, Iowa, write:

"Please take out our Want Advertisement. We have too many letters to answer."

PORTABLE ASPHALT ROOFING

THE WORLD'S BEST

Monarch, Felspar, Slag, Asbestos, Cork, Gravel, 1, 2, 3-ply Paints, Cement.

Write for Samples, Prices and Booklet.

Our line brings trade—
Gives universal satisfaction.

STOWELL MFG. CO., JERSEY CITY, N. J.

The Harrington & King Perforating Co.

PERFORATED METALS

OF EVERY DESCRIPTION, FOR ALL PURPOSES AND FOR SCREENS OF ALL KINDS

·CHICAGO·U·S·A·

212 NORTH UNION ST. CHICAGO.

114 LIBERTY ST. NEW YORK.

MAIN OFFICE & WORKS CHICAGO.

BURTON'S
Eastlake Shingles

Have been on buildings for 17 years, in good condition yet. Better than any metal, slate or wood roofing sold. Write for catalog.

The W. J. Burton Co.
DETROIT, MICH.

ABATE
The Smoke Nuisance

In the house by mounting the chimney with

IWAN'S
Volcano Revolving Chimney Top

For creating a strong upward draught in all kinds of weather, the only perfect top on the market.

Attractive in Appearance, Simplest, Most Satisfactory.
For Sale by Jobbing Trade.

For complete illustrated circular, showing construction, sizes, prices, etc., address the manufacturers,

IWAN BROTHERS, Streator, Ill.

Cream City Cornice Co.
NORTH MILWAUKEE, WISCONSIN.
Write for Catalogue and Price List.

HEADQUARTERS FOR
High Grade Bright Tins

We MANUFACTURE as a SPECIALTY High Grade Bright Tin Plate for CREAMERY WARE, SAP PANS, EVAPORATORS, COOKERS, and the better class of other HIGH GRADE TINWARE.

OUR PRICES WILL INTEREST YOU

MERCHANT & EVANS CO.,
SUCCESSORS TO
MERCHANT & CO., Inc.

Philadelphia. Chicago. New York. Baltimore. Kansas City. Brooklyn.

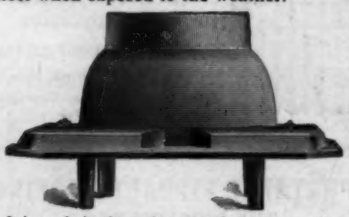
THE NATIONAL SHEET METAL ROOFING CO.

METAL SHINGLES & TILES
FROM TIN, GALVANIZED TIN AND COPPER.
REQUIRE NO PAINTING OR AFTERCARE
RUST, STORM & FIRE PROOF
LARGEST VARIETY OF STYLES

339-345 GRAND ST
JERSEY CITY, N. J.

The Best Chimney Cap

This cap as illustrated below is made of cast iron and is designed to replace the old style galvanized sheet iron hood. The Best will last a lifetime, for cast iron will last longer than any other form of iron or steel when exposed to the weather.



It is made in three sizes and the legs are adjustable. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

This is a Good Thing. Has Merit. Write for Prices

Put up in half doz. and one-third doz. crates. If your jobber does not handle the Best write to us.

STERLING FOUNDRY COMPANY, STERLING, ILL.

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH-WESTERN LINE
C. & N. W. RY.

Chicago & North-Western Ry.

which reaches the famous

Water Powers, Coal Fields, Iron Ore Ranges, Hard and Soft Lumber Districts

of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr. Freight Traffic Mgr.
E. D. BRIGHAM Gen'l Freight Agent
CHICAGO

Patent applied for

THE "MECHANICAL" VENTILATOR

TINNERS, CORNICE MEN, ROOFERS, METAL WORKERS, WRITE US FOR

"6 Reasons Why"

YOU SHOULD USE THE "MECHANICAL" VENTILATOR.

MANUFACTURED BY
MECHANICAL METAL MFG. CO.
369 Bourse Building
PHILADELPHIA, PA.

Ceiling Truths

Berger's "Classik" Metal Ceilings

Largest Variety in Exclusive Classified Designs. Easiest for the dealer to sell. Most widely advertised. Exclusively honored and awarded the Gold Medal at the St. Louis Fair.

Berger's Genuine Charcoal Iron

Excelled only by Copper. Better than Steel.
Purest and Best Made.

Eave Trough, Conductor Pipe, Corrugated Roofing, Siding, Black and Galvanized Sheets. Tin Plate, Solder. Steel Office Furniture a Specialty.

PRICES AND SAMPLES FOR THE ASKING

THE BERGER MFG. CO., Canton, Ohio

Art 6-17-5 NEW YORK BOSTON PHILA. ST. LOUIS

MEDAL AWARDED, WORLD'S FAIR, ST. LOUIS

The O. K. Steel Brake. Patented March 28, 1901

W. J. Burton Co., Detroit, Mich.
H. Weiss & Co., 20 Cliff St., New York, N. Y.
Janney, Semple, Hill & Co., Minneapolis, Minn.
C. Sidney Shepard & Co., St. Louis, Mo., etc.
Illinois Roofing & Supply Co., Chicago, Ill.
J. M. & L. A. Osborne Co., Cleveland, O.
Laskey Rogers Co., Toledo, O.
Holbrook, Merrill & Stetson, San Francisco and Los Angeles, Cal.
Lyon Conklin & Co., Baltimore, Md.

Will not warp like wood.

DREIS & KRUMP, Mfrs., 3214 S. Halsted St., Chicago

You do not have to paint
Arrow Brand Asphalt Ready Roofing

When laid according to directions it will need no care for many years.

Asphalt Ready Roofing Co., 126 Water St., N. Y.

"Canton" Metal Ceilings are labor savers and patron pleasers. Are best and cheapest "because the construction is right." Classified designs. Ever see our Art Book "G"? It shows the goods.

The Canton Steel Roofing Co.
"The Metal Ceiling Makers."
CANTON, OHIO
N. Y. Agency, No. 157 W. 23d Street

CORTRIGHT METAL SHINGLES

Tinners: The busy roofing season is here; don't confine yourselves to plain tin roof work. We offer you a larger field. Write to-day.

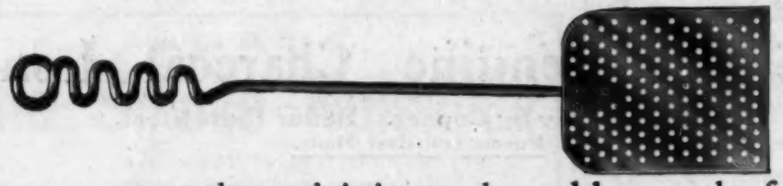
Cortright Metal Roofing Co.
Philadelphia : Chicago

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice

CLARK, QUIEN & MORSE, Peoria, Ill.

EVERY GOOD COOK WILL SEE THE MERITS OF THIS TURNER



No. 50

The grease passes through it instantly and leaves the food light and tempting. Easily cleaned. Made entirely of steel. A firm, cool grip. Will last a life time. Costs no more than a poor one.

Our catalog contains some 400 good things, and can be had for the asking. Risk a postal card on it anyway.

ARCADE MFG., CO., FREEPORT, ILL. DEPARTMENT OF DOMESTIC ECONOMY

The House Warming Manual

Is beyond all doubt the best book published on practical house heating. It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming Competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

A Leading Western Newspaper says

"The volume is a well-bound and artistically printed and illustrated volume of nearly 300 pages, and contains some masterly essays on steam heating, hot water heating and warm air heating. Nearly every prominent authority in this field is quoted, and an application of principles and improvements suggested covers all technical details in a simplified and practical way. House plans and diagrams accompany the subject matter which deals specifically with radiation, combustion, ventilation, prices, estimates and the best and latest methods for placing, connecting and utilizing the apparatus adopted."

Price, Only $3.50 Per Copy.

For sale by all booksellers or the Publisher

DANIEL STERN, 69 Dearborn St., Chicago.

WE BUILD

Power Punches, Lever Punches, Lever Shears and Bolt Cutters.

We equip shops and factories with Power, Gasoline or Steam Engines. We make all kinds of dies and special tools for the trade. Write for free booklet. Address,

WALKER TOOL CO., 132 Steel St. Lansing, Mich.

LEVER SHEAR.

This Lever Shear is made in seven sizes. It is a convenient tool for shearing plates, bars or angle iron. We build a complete line of Shears, Punches and Bending Rolls, all sizes, for hand or power

BERTSCH & COMPANY,
Cambridge City, Ind.

ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power

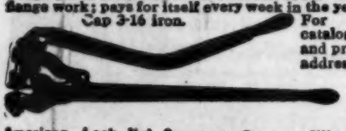
Send for circulars

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 189 Vincent St., CLEVELAND, O.

ELECTROTYPE CUTS

MADE TO ORDER FOR ALL PURPOSES.
IF YOU WANT THE BEST MADE,
SEND US YOUR ORDER,
WE ARE PROMPT.
PRICES ARE EQUITABLE AND JUST.
ST. LOUIS ELECTROTYPE FOUNDRY
214-216 PINE ST. ST. LOUIS, MO.

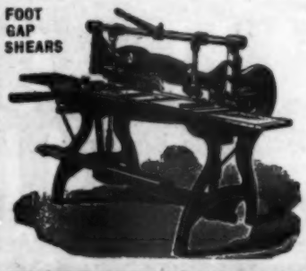
PATENT LIGHTING PORTABLE PUNCH NO. 3; a high grade tool, adapted to all forms of curved or flange work; pays for itself every week in the year. Cap 3-16 iron.



For catalog and price address

American Lock Nut Company, Oregon, Illinois

FOOT GAP SHEARS



TOOLS FOR SHEET METALS

INCLUDING

Tinners' and Roofers' Tools,
Shears, Punches, Presses and Dies,
Can-Making Machinery

MADE BY

NIAGARA MACHINE & TOOL WORKS
BUFFALO, N. Y.

DIES AND STAMPINGS

OF ALL KINDS TO ORDER

Hardware Specialties, Etc., Manufactured to Order. Send Samples or Drawings for Estimates. Write for Our Booklet. We Make Tumbling Barrels.

THE GLOBE MACHINE & STAMPING COMPANY
971 Hamilton Street, CLEVELAND, OHIO

GEROCK BROS. MFG. CO.

Sheet Metal Ornaments and Statuary

Detail Work a Specialty. **Ask for Catalogue.**

1227 Manchester Ave., ST. LOUIS, MO.

Hardware Special Potts Pattern Sad Irons

The Hardware Special has a nickel-plated base, tops and handle bars and posts are finished in Bawer-Barff. The irons are standard weight and have the name in polished letters on top of each iron. They are not sold to Department Stores, Catalogue Houses, Rackett Stores, or houses who sell this trade.

The unbreakable handle furnished with these irons have the following points of merit over all other handles: They keep the hand cool, they do not hurt palm of hand, the wood handle is always cool. Handle is attached to upright posts by bolt.

Manufactured by

Schreiber & Conchar Mfg. Co., Dubuque, Iowa

"VICTOR" COAL HODS ☛ ASK YOUR JOBBER

PROFITS IN COAL HODS.

One important fact about "VICTOR" Oval Bottom Extra Heavy Coal Hods is, the merchant who buys them to sell, and the man who buys them to use, make a bigger profit on the deal than anybody else.

That's the kind of goods The Victor Stamping Company manufactures.

Coal Hods, Water Pails and Wash Tubs a specialty.

Write us.

The VICTOR STAMPING COMPANY (BROADWAY) LOVELAND, O.

NESCO WROUGHT STEEL MASLIN KETTLES

ENAMELED IN- AND OUTSIDE.

Furnished With or Without Covers

HANDIEST ARTICLE EVER PRODUCED FOR PRESERVING PURPOSES

Get some at once and be convinced

Also Remember That We Are HEADQUARTERS For all Styles of

Preserving Kettles, Fruit Funnels, Basting Spoons, Measures, Etc., in Tin Ware or Enameled Ware

THE SEASON IS HERE AND YOU MUST HAVE THE GOODS, AND WE ARE THE ONES TO GIVE YOU THE SERVICE

NATIONAL ENAMELING & STAMPING CO.

MILWAUKEE NEW YORK ST. LOUIS BALTIMORE NEW ORLEANS CHICAGO PHILADELPHIA

The IMPROVED FARMER'S FRIEND CREAM SEPARATOR

Made of heavy tin plate and the bottom inclines to the outside preventing any disturbance to the cream. Separates milk and cream perfectly.

THE BLANKE & HAUK SUPPLY CO.
202-204 Market St., St. Louis, Mo.

When He Comes Into The Store,

OUR NEW GAUGE

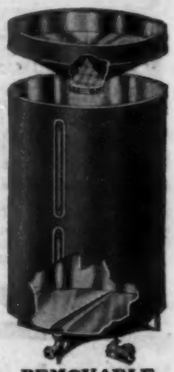
Mr. Dealer, and asks for a Cream Separator, don't you want to offer him something that neither your competitor nor the catalog house, nor anybody else can equal? Don't you want him to feel that your store is the best and that you sell the best wares?

Smith's Automatic Cream Separators

cannot be beaten or equalled when it comes to material and workmanship. The convenient devices make them absolutely incomparable. Smith's Removable Gauge is one reason why more of these are made than of any other.

We furnish our Separators grained in Oak, Bird's Eye Maple, Chestnut, or to resemble any other wood, if desired. Otherwise they are given a coat of Aluminum.

Write us now for catalog illustrating Cream Separators, R. F. D. Mail Boxes, Smith's Strainer Pails, Strainers, etc.



REMOVABLE INNER CAN

SMITH BROS. MFG. CO., 246 E. Kinzie St., Chicago, Ill. 257 S. Meridian St., Indianapolis, Ind.

EXCURSION to Asbury Park, N. J. via the Wabash

On Account of the National Educational Association, Leaving Chicago June 29 to July 2

Low rates, long limits, liberal stop-over privileges, with the option of Lake Steamers between Detroit and Buffalo, Hudson River Day Line Steamers from Albany to New York, and Ocean trip from New York to Atlantic Highlands.

The only line running Free Chair Cars between Chicago and New York.

Write for free copy of Wabash N. E. A. Illustrated Folder, containing maps, time cards and full details.

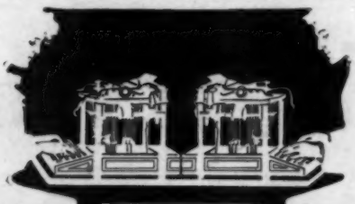
C. S. CRANE, G. P. & T. A., St. Louis.
F. A. PALMER, A. G. P. A., Chicago.

SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS Batavia, Ill.



Good Operators Say

that they can do more and better work with less effort on the

Remington

than on any other writing machine.

Remington Typewriter Company
327 Broadway, New York

Mr. Dealer:

Have you ever considered the advantage of handling Canton Clothes Dryers? They are in demand in Apartment Houses, Hotels, Hospitals, Sanitariums, Reformatories, Public Buildings and Residences. A good field, Big profits, Quick returns. Do you want the agency for your city? Write quick. Catalogue tells all. Get one.

The Canton Clothes Dryer & Mfg. Co.

Office and Works: CANTON, OHIO

New York Office, 157 W. 23rd St. St. Louis Office, 1232 Olive St. Baltimore Office, 1529 Maryland Ave.

THE

"Big Four Route"

passes through an interesting Country every mile of the way

CHICAGO TO

INDIANAPOLIS
CINCINNATI
LOUISVILLE

and all points

SOUTH
and SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. R'ys. For reservations, etc., call on or address

J. C. TUCKER, G. N. A.
258 Clark St., Chicago.

More Goods at Less Cost

That is just what it means to you.

You can handle your goods cheaper, easier and quicker on our low down, short turn delivery wagons than on any other kind. See cut of gear. Body is low down, only 20 inches from ground, and is full width. Full height wheels in front, making light draft, yet on account of our Patent Short Turn Gear it will turn shorter than a high cut under. **Easy to load.** One man with our wagon can do the work of two with a high wagon. **Draft is light.** One horse can haul big load. **Short turn** so can get around in alleys and crowded streets. **A good ad** and an economical investment.

Stop and Think What This All Means.

It means that no up-to-date, economical merchant can afford to buy or use any other wagon. We make the only successful short turn low down wagon on the market. That we have proven to thousands. We make them to order as good, as durable and as satisfactory as the best of material and superior workmanship can produce. Built to run every day, everywhere, and to stand up.

WE MAKE MANY STYLES suitable for all kinds of trade, Hardware, Furniture, Piano, Grocery, Milk, Laundry, Bakery, Meat. Complete catalog on request. It will pay you to investigate. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 Edwards St, Sycamore, Ill.

FORMERLY SHIPMAN, BRADT & CO., DE KALB, ILL.

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

CINCINNATI, OHIO, U.S.A. 5/16/05.

MAY 17 1905

The American Artisan,

Chicago, Ill.

Gentlemen:-

This is to inform you that we are well pleased with the returns we are getting from the ad which we are running in your publication this being taken from a general observation of the returns we are getting from our half page ad which we are running in practically all the leading trade journals.

Yours truly,

LED/LH

Boss Washing Machine Co.,

Louis E. Dietz

"BOSS" WASHING MACHINES

Illustrations represent our two best selling Washers.

They are non-competitive, therefore most profitable to handle and sell.

Write at once for catalogue and price list, also our nearest distributing point to your location.

The only line of Washers not found in the catalogues of catalogue houses, therefore appeal to every dealer for support.

Address

Boss Washing Machine Co.

Cincinnati, - Ohio

Boss Double Action

This machine is built on the true principle of rubbing clothes, similar to rubbing them on the old fashioned board, only that it rubs a quantity at a time and without the slighest injury to the finest of fabric including laces.

Improved Boss Rotary

Has Gears protected by shield or cover.
" Telescopic dasher post.
" Large Cypress tub and rub-block.
" Either stave or detachable legs.
" Highest speed of any rotary.

Locations for Industries

Erie Railroad System Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, and can advise with manufacturers of specific products as to suitable locations, furnishing them with current information of a comprehensive nature, dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America.

Every section of the System has its particular merits. It has great general and coal, oil and natural gas resources,

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between Chicago and New York.

Manufacturers' inquiries as to locations are treated in strict confidence and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company
21 Cortlandt Street, New York

Do Things Differently.

Many retail merchants must do this or

Catalogue Houses

will take their business away from them

Lock, Stock and Barrel.

I give my subscribers many tried and successful ways of combating these houses. In addition to this I send them four different ads each month for twelve months (48 ads per year).

Special ads for special days, as New Year's, Washington's Birthday, Easter, Decoration Day, Fourth of July, Labor Day, Thanksgiving and Christmas, are included in the above, and will reach subscribers in due season.

I will also send with the above each month ten "Catch or Head Lines" and two trade pulling schemes (120 catch lines and 24 schemes per year).

My original follow-up system for creating interest in and calling special attention to your ads will be sent subscribers with the first installment.

Short talks for the busy merchant on advertising, best season to advertise, suggestive advertising, direct command advertising, space, preferred space, location, size of ad, etc.

I will write for but one concern of a kind in a place.

I am still writing ads for people that I began writing for twelve years ago. Write, telling me what lines you handle. Mail me one of your local papers, and send $3.50 for the entire course.

Edwin Caldwell, Burlington, Wisconsin.

When things aren't going quickly, and you can't use twine;
When cobwebs gather thickly, just drop us a line.

1905 Ocean Wave Washer

With Covered Gear

You want the exclusive agency?
WRITE US.

VOSS BROS. MFG. CO.
Davenport, Iowa

E. H. TITCHENER & CO.

STAPLES AND WIRE SHAPES
IN ALL VARIETIES.
Binghamton, N. Y., and 42 No. Peoria St., Chicago.

H. WEISS & CO., 20 CLIFF ST., NEW YORK

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools.
Cornice Makers' Tools.
Coppersmiths' Tools.
Pipe Threading Machines.

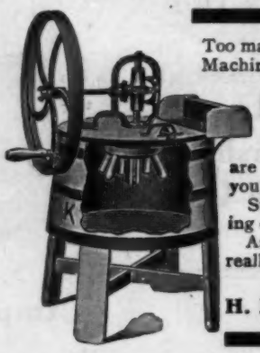
Second-Hand Goods bought, sold and exchanged.

"A Trio of Trade Winners"

The "B.B." Roller Gearing Rotary
The Schroeder " " "
The Brammer Rotary

BEST IN THE WORLD
Write us for further particulars.

Benbow-Brammer Mfg. Co.
ST. LOUIS, MO.



Too many dealers overlook the importance of selling a Washing Machine that has a reputation that is widely advertised.

O. K. Washing Machines

QUENTELL

are being extensively advertised, — and sooner or later, you'll have a call for O. K. washers.

Successful hardwaremen are those who prepare for coming events—before they arrive.

Ask for our booklet and see how good the O. K. Washer really is.

Booklet and Special Prices on Request.

H. F. BRAMMER MFG. CO., Davenport, Ia.

Stop and Think!

6,000

live hardware dealers find the White Lily Washing Machine the best washer and best seller on the market.

If you have not got a reserved seat on the band wagon, you had better write to-day.

White Lily Washer Co.
Toledo, Ohio Davenport, Iowa

EVERY ONE GUARANTEED.

Atlas Wash Boilers are good ones.

Made of XX and XXX charcoal tin plate with 18 oz. copper bottoms and in all 16 oz. copper. Patented one piece handle will never break. 6 rivets in each.

Steiner Heinkel & Co.

2605 N. 14th St., St. Louis, Mo.

EXCLUSIVE MANUFACTURERS OF

High Grade Wash Boilers

To work up a good trade buy your boilers direct and always get same sizes and clean goods. We make over 50 different kinds and sizes.

Write for Price List.

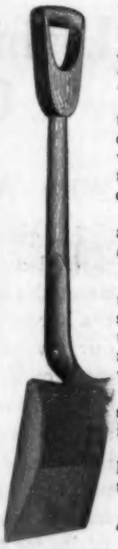
J. W. ROBISCH, Jefferson, Wis., writes: Thanking you for sending your valuable paper regularly, as I could not get along without it. Having recently branched out in the hardware business, your paper is more valuable than ever. 6-3-05

No. 60 BULL DOG END CUTTING NIPPER

QUALITY GUARANTEED

We make the most complete line of guaranteed pliers and nippers in the world. Write for GREEN BOOK. ASK YOUR DEALER FOR UTICA TOOLS If he has not got them write us.

UTICA DROP FORGE & TOOL CO.
Factory: Utica, N. Y. 296 Broadway, NEW YORK



Easy Work
with our Patented Plain Back Shovels.

Balance is most easily obtained because the shank curves right at the blade, which brings the load next to the hand, and the man accomplishes more.

There is no loss in leverage as with strap socket shovels.

They Last
twice as long as strap socket shovels, because they have a tubular, one-piece and integral socket, reinforced by a welded steel back.

The wood shank of our shovel is completely encased in steel.

They do not go to pieces like strap socket shovels when the back strap gets worn.

We do not make shovels labeled "AVERY SHOVEL CO."

Request catalogue of "NEVER-BREAK" Seamless Steel Cooking Utensils, Garden Trowels, Post Hole Diggers, SNOW SHOVELS, SIDEWALK SCRAPERS and FURNACE SHOVELS.

The Avery Stamping Co., Cleveland, Ohio
Mfrs. "NEVER-BREAK" GOODS.

"AMERICAN"
(2 in 1)
TWIN FREEZER

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer

SOMETHING ENTIRELY NEW NEVER DONE BEFORE

Ask Your Jobber About It.
Send for New Freezer Catalog.

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

4 Trains a Day
via the
MONON ROUTE
CHICAGO INDIANAPOLIS & LOUISVILLE RAILWAY
and C. H. & D. Ry.
Only 8 Hours
from
CHICAGO
to
CINCINNATI

BY DAY, Parlor and Dining Cars
BY NIGHT, Palace Sleeping and Compartment Cars.

CHAS. H. ROCKWELL, Traffic Manager. FRANK J. REED, Gen. Pass. Agt.
200 Custom House Place, CHICAGO.

HURWOOD

ICE PICK

DON'T CHOP—JUST PUSH

The points are as sharp as needles. They can be neither bent nor broken in ordinary use. Many different styles and sizes are described in our catalog.

HURWOOD MFG. CO., Bridgeport, Conn.

HENRY CHAFFEE, AMBRIA, IND., WRITES:

"Please take my ad. out of THE AMERICAN ARTISAN. I got two or three letters daily and have something like twenty jobs in view."

Magic Pattern Rule **Will Lay Out Patterns**

for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

Price, complete in a nice wooden box with Chart, $4.00 net cash.

LUFKIN RULE CO., Saginaw, Mich. (Mention THE AMERICAN ARTISAN.)

Lightning Conductor Ground Rod

(Patented April 30, 1895.)

With Automatic Water Supply

The ground rod is the most important part of the rod and most neglected generally. Sometimes the ground is perfectly dry and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. This is a most important and ingenious contrivance. It is made of pure copper tube and sells for 25c per foot; no more or no less. We want to furnish it to a responsible dealer in every town. Write for Catalogue.

The Security Lightning Rod Co.
Burlington, Wis.

This Label on all Taplin's Pat. Improved **Dover Egg Beaters** stands for **Quality and Durability.**
THE TAPLIN MFG. CO., New Britain, Conn., U.S.A.
155 Chambers St., New York.

"Pullman" TROUSER HANGERS

No. 4 Size

Leads them all. Folder No. 25 tells why. Sent free.

PULLMAN MFG. CO., Rochester, N. Y., U. S. A.

Samples, by reg. mail $2.00 each.
CUTS 1-4 SIZE.

COMBINATION **RULE**
Spirit Level, Square, Plumb, Bevel, Inclinometer, or Slope Level, Brace Scale, Protractor, Right Angle Triangle, etc.

UNION FACTORY. Lock Drawer 13.

The **CHAPIN-STEPHENS CO.**
PINE MEADOW, CONN., U. S. A.

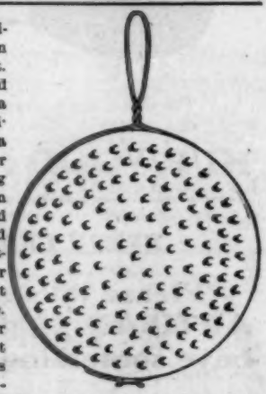
$25 ON 5 TON
is what you can save
We make all kinds of SCALES.
WRITE FOR PRICES
Also B. B. PUMPS and WIND MILLS
BECKMAN BROS., Des Moines, Ia.

The Bailey Auger Bit

is carefully made from a high grade of steel. Its special features are—
Rapid and Easy Cutting, Durability, Fine Finish. Prices Reasonable.
We also manufacture Planes, both Iron and Wood, Chisels, Gouges, Drawing Knives, Spoke Shaves, Bench and Hand Screws, etc.
NOTE: We Do Not Sell Catalogue Houses.

Ohio Tool Company. Factories: COLUMBUS, OHIO AUBURN, N. Y.

JUST OUT!
Rulofson's California Toaster

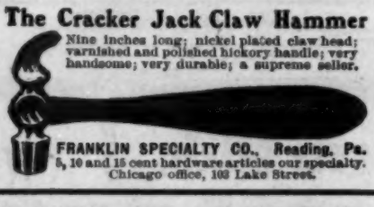


Makes beautiful golden brown toast. Heats rolls and biscuits to a nicety; substitute for a double boiler preventing scorching; an ideal bed warmer and carriage heater—better than a hot water bottle. The popular price (25c) at which it is sold commends it to all class of buyers. Large profits to jobbers and retailers.
Advertised largely in many popular periodicals
WE PAY THE FREIGHT.
Write for special prices and exclusive territory.

A. C. RULOFSON CO.
Sole Manufacturers and Patentees
CROSSLEY BLDG., SAN FRANCISCO, CAL.

HOMESEEKERS EXCURSIONS
On FIRST and THIRD TUESDAYS in each month to **VIRGINIA**
Via NORFOLK & WESTERN RAILWAY
For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address
ALLEN HULL, D. P. Agt., Columbus, Ohio

The Cracker Jack Claw Hammer



Nine inches long; nickel plated claw head; varnished and polished hickory handle; very handsome; very durable; a supreme seller.

FRANKLIN SPECIALTY CO., Reading, Pa.
5, 10 and 15 cent hardware articles our specialty.
Chicago office, 103 Lake Street.

STANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers NEW BRITAIN, CONN.

Porter's "Meadow King"

HAY CARRIER

Wide mouth, swing fork pulley, neatest design.

Largest Line of Hay Tools on Earth

Write for Catalogue and prices

J. E. PORTER CO.

OTTAWA, ILL.

Richards Cycle Ball Bearing Steel Frame Grind Stone

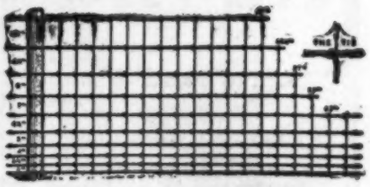
Built on up-to-date Mechanical Principles. Stone guaranteed best quality. Berea grit for general grinding. Frame is the strongest and most rigid on the market, on account of its peculiar construction. No trouble to sell this machine. Place it where it can be seen and it will speak for itself.

Try a sample lot and you will be surprised at the results. Write for catalog of Door Hangers and Hardware Specialties.

The Richards Mfg. Co.

AURORA, ILLINOIS

The Fence That Suits



Your Customer

is the one for you to handle.

Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything.
Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

SEND FOR CATALOGUE.

THE DENNING WIRE & FENCE CO.

CEDAR RAPIDS, - IOWA.

Bolt and Screw Cases

Save Time and Money

A necessity for Hardware Dealers, Machine Shops, Pattern Shops and in fact any one who handles small articles; last indefinitely. Send for descriptive booklet.

AMERICAN BOLT AND SCREW CASE CO.

Dayton, Ohio U.S.A.

600 Different Specialties

Household Inventions and Bath Fixtures.

If you haven't our Catalog write at once.

Silver's Brooklyn

304-314 Hewes St., 432 Broadway, BROOKLYN, N.Y.

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.

The only Anchor made for between the posts and for corner posts.

LENAWEE MFG. CO.

ADRIAN, MICH.

Clipper Lawn Mower Co.

DIXON, ILL.

THE MOWER that will **Kill all the Weeds in Your Lawns.** If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders of roots, the grass will become thick and the weeds will disappear. **The CLIPPER will do it.**

NO MAN ON THE ROAD.

SPOT CASH PRICES TO THE TRADE.

No. 1.—12-inch	$4.50
No. 2.—15-inch	5.00
No. 3.—18-inch	5.50
No. 4.—21-inch	6.00

Please send Draft, P. O. Money Order or Express Money Order or Registered Letter.

I have heard it said that hardware dealers were the slowest, most conservative people on earth. I have been given to understand that they beat John Bull for adherence to old methods. I don't believe it. The way they have been taking up the Ideal Rural Mail Box answers the argument conclusively.

C. G. FOLSOM
South Bend.
Indiana

HILL'S
Famous
DRYERS
for the lawn
500,000
in use.

Made also for Balcony and Roof.
Send for Catalogue AA.
HILL DRYER COMPANY
WORCESTER, MASS.

THE AMERICAN ARTISAN
Want Ads fill your wants.

BLICK No. 3 THE BEST.
Rural Free Delivery Box

Made of Heavy Galvanized Steel.
Painted with Aluminum.
Positive Locking Flag Signal.
Automatic Spring Latch.
It is a big one—6½x8½x19 inches.
It will Get the Business.
You Better Get it.
Box and Price Right—$5.88 per Dozen.
Better Order Now.

BLICK-WILLIAMS CO., Indianapolis, Ind

DON'T ALLOW THE FELLOW A THOUSAND MILES AWAY to sell the rural mail boxes in your vicinity.

You Can Make a Handsome Profit and meet all competition if you are armed with "the Gem line."

INSIST that your jobber supply you with the **GEM.**

SCHOFIELD'S ECONOMY OVEN for Gas and Gasoline Stoves is WARRANTED TO BAKE MORE PERFECTLY than any other OVEN on the market and to save three-fourths the expense of doing the small every-day baking. Sample sent at doz. price. Order NOW of

SCHOFIELD & CO., Man'frs,
FREEPORT, ILL.

MAKE MORE MONEY

Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the easiest sold and the best advertised.

SIGNAL MAIL BOX CO.
106 Benton St., Joliet, Illinois

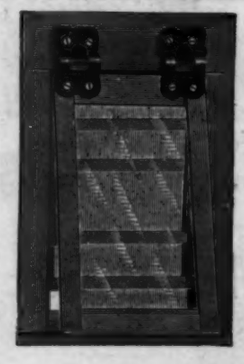
Independent Mfg. Co.
Cleveland, O.

When a man buys a Floor Spring Hinge, he wants good service, long service, and satisfactory service.

That's just what he will get—if you sell him **MATCHLESS** Ball-Bearing Floor Spring Hinges—and you'll make a good profit in the bargain.

Write for catalogue and special prices. Dept. A.

LAWSON MFG. CO., 40 Dearborn Street, CHICAGO
107 Chambers Street, New York



Full length window screens keep out all the flies and protect the windows. Screens attached with

GOSSETT'S
Detachable Suspension
HINGES

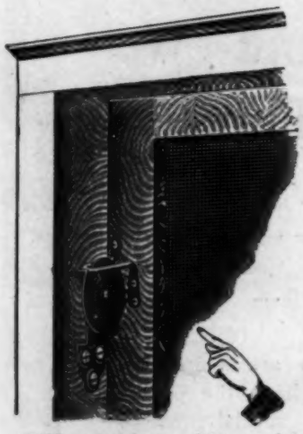
are easily put up or removed—no tools or ladder necessary. Write for free sample pair.
Sold by Hardware Jobbers and Dealers.
Manufactured by

F. D. KEES, Beatrice, Neb.

American Door Catch

FOR

Fly Season



Holds any door, right or left, flush or lapping; inside or outside; on cupboard doors, right or left side, on top or underneath shelf.

It keeps the dust out; keeps the flies away; stops rattling, prevents warping, and keeps the door closed.

Goes on the inside of door and can be locked.

Retails 15c

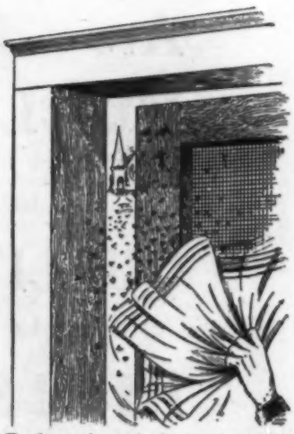
The best catch on earth and at the right price.

Sold by all Leading Jobbers.

Drop a postal for sample catch, mailed free. Attach it to a door and note result.

A mounted wood model free with first order of 3 dozen.

Manufactured by

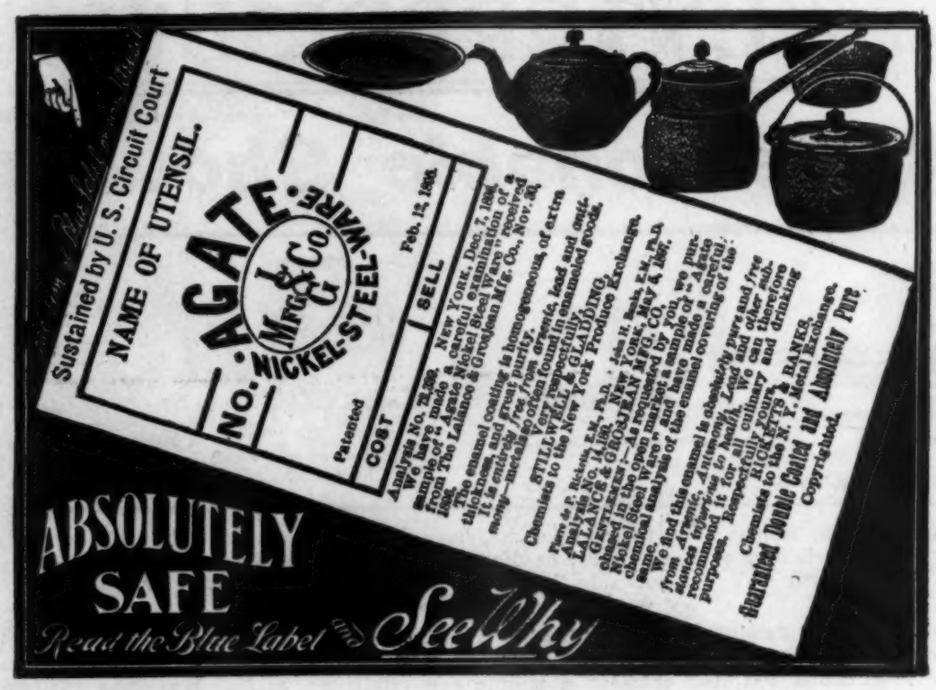


Each catch packed complete with cardboard templet, screws, staple and hook for locking is sealed in a strong envelope; no extra parts needed on the American. When you buy an envelope you get it all.

One dozen envelopes in a neat strong carton, swing back cover, and two-color display card.

American Hardware Mfg. Co.,

OTTAWA, ILLINOIS



"DISSTON" FILES

Are UNEQUALED and We FULLY WARRANT THEM

As to

QUALITY

and

FINISH

TEST

The steel is made under personal supervision in our own works direct from selected raw material. We have been making steel for the past fifty years.

None but the most skilful workmen are employed. The blanks are forged. The teeth have the proper shape. The files are hardened by our special process.

We use 30,000 dozen **Disston Files** annually in our **Saw Factory.** We know what a good file should be and what it should **do.**

Henry Disston & Sons, Inc.

Keystone Saw, Tool, Steel & File Works.

PHILADELPHIA, PA.

"ENTERPRISE"

A Seasonable Showing

Cherry Stoner, No. 1, $7.50 doz.

Lawn Sprinkler, No. 1, $3.50

Fruit, Wine and Jelly Press, No. 34, $3.00

Food Chopper, No. 50, $1.25

AT this season, women (and their husbands), have it on their minds to buy a Cherry Stoner, or Lawn Sprinkler, or Fruit Press, or Food Chopper. They know all about "Enterprise" goods, and you will make many a sale that would otherwise be lost if you

SHOW THEM

Two Questions: Are you having good sales of the new size, No. 50 Enterprise Food Chopper? It chops 1½ lbs. of meat a minute and retails for $1.25. Have you got our 1905 catalogue handy for reference? If not drop a postal for another.

New York Branch, 10 Warren St. — THE ENTERPRISE MFG. CO. OF PA. Philadelphia, U. S. A. — San Francisco Branch, 104 Front St.

PETERS AMMUNITION

Offers the Retail Hardware Dealer a good profit and the satisfaction of handling a strictly up-to-date first-class line—one which he can conscientiously recommend—which will bring him increased business and hold it. Peters goods are

THE EASIEST TO SELL—THE BEST TO SHOOT

All Peters metallic cartridges (except, of course, the smokeless) are loaded with the wonderful Semi-smokeless powder, much superior to ordinary black powder goods. Peters Loaded Shells include a complete line—seven kinds in all—loaded with high quality black powder, Semi-smokeless powder, or any of the standard smokeless brands.

No Hardware dealer can afford to handle goods of only moderate quality, when the BEST can be had at the same price.

Ask your jobber about it. If he doesn't sell Peters goods, write the manufacturers direct and they will tell you where to get them.

THE PETERS CARTRIDGE CO., Cincinnati, U. S. A. New York, No. 98 Chambers St., T. H. Keller, Mgr.

DON'T DRINK ICE WATER

Don't Sell Ice Water Coolers—They're Deadly. Sell the Only Hygienic Water Cooler

MAJOR'S COMPARTMENT COOLER

Ice and water in separate compartments and water is kept at an even temperature.

The inside is made of malleable iron and water compartment is lined with white porcelain. Metal parts are not exposed to the outside air, and the dead air space lying between the outer and inner receptacle makes it a perfect non-conductor and consequently the amount of ice used is comparatively small. Body is of Flemish oak with polished brass hoops and makes a handsome ornament for dining room or office.

Economical, simple, substantial—with nothing to get out of order. Major's Cooler will last a lifetime. It never sweats. Has an extra faucet to draw off melted ice.

An excellent dispenser for fresh cream, iced tea and any light beverage.

Send for Price List and Circular, for further information.

A. MAJOR, 461 Pearl Street, NEW YORK

He's Found It

and is pointing it out to you Mr. Hardware Dealer.

Found what? Why the most up-to-date and progressive wholesale hardware house in the west—the one with a reputation of carrying the most widely assorted stocks, making the promptest shipments, making the most attractive prices.

LEE-GLASS-ANDREESEN HARDWARE CO.
Omaha, Neb.

Good Roofing Tin

Not the imaginary kind of goodness but the real thing that you can see and feel when you examine and work the tin. Samples and prices yours for the asking.

The McClure Co.
Pittsburgh Philadelphia

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address
EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

American Made

Planished Steel is cheaper than Genuine Russia Iron, which it resembles in looks, wearing and working. Comes in all gauges, 28x60", also special sizes, packed in metal cases. Write us about it.

Follansbee Brothers Company

PITTSBURGH
ENNA.

Dickey

Tinners Find Employment
By advertising and using
THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give Tinners employment making stocks, and give the dealers profit. Sold by Hardware Jobbers and Dealers.

Made only by
POWERS BROS.
STREATOR, ILL.
This cut free to dealers.

The "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
Patent applied for.
Manufactured only by
COONEY & GEIGER,
19 and 21 E. South St.
INDIANAPOLIS, IND.

The Good Tinner, or the Successful Roofer or the Corniceman with money in the bank doesn't wait until the day he needs Eave Trough or Conductor Pipe before he sends us his order.

Better follow his example, send us your specifications now, and we'll ship whenever you wish.

Saves annoying delays at both ends.

Our attractive quotations for a postal card.

ILLINOIS ROOFING & SUPPLY CO.,
23 Lake Street, Chicago

DEALERS
Throw your line among Fishermen and you'll get a strike—with a rush for the goods—if it's the genuine line of

Pflueger's Fine Fishing Tackle

made only by the
Enterprise Manufacturing Co.

25 years of experience, combined with the largest manufacturing facilities in this country, enable us to produce a superior line of fishing tackle that fishermen insist on having.

PFLUEGER'S PATENTED REVERSIBLE HINGE INSURES FREE SPINNING AND PREVENTS BENDING OR BREAKING

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines, Everything in Fishing Tackle, packed for effective display.

Best Selling Line You Can Carry.

NOTICE—Free to any dealer in sporting goods, sent express prepaid, 155 page illustrated catalogue, No. F23, metal fish sign, and window transparency in 8-color lithograph.

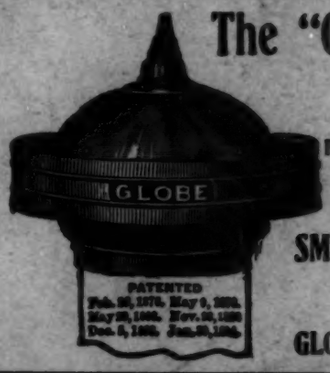
The Enterprise Manufacturing Co.
AKRON, OHIO, U. S. A.

Osgood Standard SCALES.
ASK YOUR JOBBER ABOUT THEM.

Coat & Hat Hooks

The Bradley "Metal Clasp" has a stiff brace in the angle and full rolled thread and lower hook will spring and not deface wall.

ATLAS MFG. CO.,
New Haven, Conn., U.S.A.



The "GLOBE" Ventilator

in BRASS, COPPER, GALVANIZED IRON, and with Glass Tops for Skylight purposes.

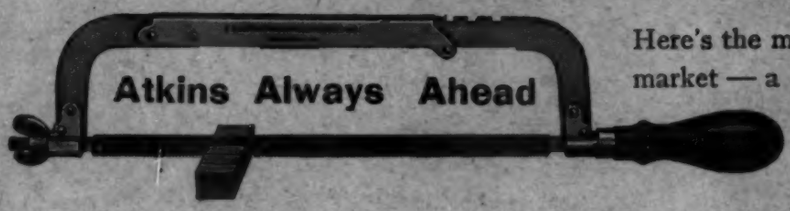
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

SMOKY CHIMNEYS CURED

"GLOBE" Ventilated Ridges.
Send for Pamphlet.

Manufactured by
GLOBE VENTILATOR CO., Troy, N.Y.

The ATKIN'S HACK SAWS Are Great—Sellers



Here's the most desirable Hack Saw Frame on the market — a time saver — adjustable to different length blades—made of finest steel—nickel plated—sure to please every metal worker. A great seller.

ATKINS HACK SAW BLADES will cut anything. Harder than a file. Always reliable. Our "Spring Flexible Back" Hack Saw Blades are unequaled by any of the so-called Spring Back Blades on the market They stand in a class by themselves. Write for Booklet and Prices.

E. C. ATKINS & CO., Inc., Indianapolis, Ind.

Branch Houses: New York City, Atlanta, Ga., Portland, Ore., Chicago, Ill., Memphis, Tenn., Minneapolis, Minn., Seattle, Wash., San Francisco, Cal. Toronto, Canada